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THE VEDIC MAGAZINE

AND

GURUKULA SAMACHAR.

Edited by Professor RAMA DEVA.

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वैदिक धर्म के अमूल्य ग्रन्थ।

[१] योग-साधन-माला।

(१) संध्योपासना। योग की रीति से संध्या करने की पद्धति। मूल्य १॥) डेढ़ रु०

(२) संध्या का अनुष्ठान। मूल्य ॥) आठ आने

(३) वैदिक-प्राण-विद्या। प्राणायामपूर्वार्ध। मूल्य १) एक रु०

(४) ब्रह्मचर्य। सचित्र। वीयरक्षण के उपाय। मूल्य १।) सवा रु०।

[२] उपनिषद्-ग्रन्थ-माला।

(१) "ईश" उपनिषद् की व्याख्या। मूल्य ॥=) चौदह आने।

(२) "केन" उपनिषद् की व्याख्या। मूल्य १।) सवा रु०।

[३] आगम-निबंध-माला।

(१) वैदिक-राज्य-पद्धति। मू०।-) पांच आने

(२) मानवी-आयुष्य। मूल्य ।) चार आने

(३) वैदिक सभ्यता। मूल्य ≡) तीन आने

(४) वैदिक-चिकित्सा-शास्त्र। मूल्य ।) चार आने।

(५) वैदिक स्वराज्य की महिमा। मूल्य ॥) आठ आने।

(६) वैदिक सर्पविद्या। मूल्य ॥) आठ आने

(७) मृत्यु को दूर करने का उपाय मूल्य ॥) आठ आने।

(८) वेद में चरखा। मूल्य ॥) आठ आने

(९) शिवसंकल्प का विजय। मूल्य ।॥) बारह आने।

(१०) वैदिक धर्म की विशेषता। मूल्य ॥) आठ आने।

[४] स्वयं-शिक्षक-माला।

(१) वेद का स्वयं शिक्षक। प्रथम भाग। मूल्य १॥) डेढ रु०।

(२) वेद का स्वयंशिक्षक। द्वितीय भाग मूल्य १॥) डेढ रु०।

[५] देवता-परिचय-ग्रन्थ-माला।

(१) रुद्रदेवता का परिचय। मू०॥) आठआने

(२) ऋग्वेद में रुद्र देवता। मू०॥=) दसआने

(३) ३३देवताओंका विचार मू०≡) तीनआने

(४) देवता-विचार। मूल्य ≡) तीन आने।

[६] धर्म-शिक्षा के ग्रन्थ।

(१) बालकों की धर्म-शिक्षा। प्रथम भाग मूल्य -) एक आना।

(२) बालकों की धर्म-शिक्षा। द्वितीय भाग मूल्य =) दो आने।

(३) वैदिक-पाठ-माला प्रथम पुस्तक। ≡) तीन आने।

[७] यजुर्वेद का स्वाध्याय।

(१ यजु०अ० ३०। नरमेध मू० १) एक रु०

(२) यजु०अ० ३२। एक ईश्वर उपासना। मूल्य ॥) आठ आने।

(३) यजु० अ० ३६। शांति का उपाय। मूल्य ॥) आठ आने।

[८] ब्राह्मण-बोध-माला।

(१) शतपथबाधामृत। मूल्य ।) चार आने

[७] वैदिक धर्म।

यह सचित्र मासिक पत्र वैदिक धर्म के तत्व ज्ञान का विचार और प्रचार कर रहा है। योग साधन विषयक लेख भी सब को करने योग्य सुगम रीति के साथ इसमें प्रसिद्ध होते हैं। वार्षिक मूल्य ३॥) साढे तीन रु० है। शीघ्र मंगवाइये।

मन्त्री—स्वाध्याय मंडल, औंध (जि० सातारा)।

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THE VEDIC MAGAZINE

सर्वेषामेव दानानां ब्रह्म दानं विशिष्यते । (मनु०)

Of all gifts that of Divine knowledge is the highest and noblest.

VOL. XXI No. 2. | SHRAWAN 1980, JUNE 1923. | WHOLE No. 19 NEW SERIES No. 37.

Ancient Indian Engineering Philosophy.

(By Rao Sahib K. V. Vaze I. C. E.)

CHAPTER XIV.

यज्ञ शाला

धर्म Duty means something that iis due or debt. It is defined in महाभारत as under :—

धारणाद्धर्ममित्याहुः ।

In अर्थ शास्त्र debts are of six kinds viz., (1) वृद्धि a Loan, (2) आधि a contract (3) प्रत्यधि on credit. (4) निधि a Deposit (5) समृद्धि Partnership and (6) अनृण्य unindebtedness. Duty is similarly of six kinds as noted below.

(1). वृद्धि The duty between parents and children is a loan. A child has borrowed its body with its potentialities from its parents. This is a loan and increases at compound interest and by further loans as the child grows and thus it is its first and most paramount duty.

(2). आधि The duty between brothers and sisters is a contract. A brother or sister have to respond, and owe duties to one another simply because they are born of the same parents.

(3). प्रत्यधि The duty between teachers and pupils is 'on credit.' The teacher gives his knowledge on credit and has to be paid by a similar gift by the pupil to others in due time and as circumstances permit.

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(4) **निधि** The duty between a husband and a wife is a deposit The husband deposits his property and issues with the wife for being properly cared for.

(5) **समृद्धि** The duty between citizens is a partnership. The whole state is a company of which each citizen is a partner who contributes his quota and shares in the profit or loss.

(6.) **आनृण्य** The duty between the Creator ond his creatures is unindebtedness. There are two ways of fulfilling this, viz. 1. by repaying all debts as per contract—this is the **कर्म योग** of **लोक. मान्य तिलक** or 2. by becoming insolvent, this is the **कर्म संन्यास** of **श्री शंकराचार्य**

When a human being wants to get any relief from a want there are four ways of doing this, viz. **तप, कर्म, दान** and **यज्ञ. तप** means Suffering, **कर्म** means Exertion, **दान** means Gift **यज्ञ** means Exchange. Suppose a man wants to overcome cold then he may quietly suffer it, or he may produce the necessary heat by moving his hands and feet to and fro or he may get heat as a gift from fire or he may get it by the use of a blanket. Whichever way a man may choose to adopt the expenditure of flesh and bones is the same. As much flesh and bone is spent in suffering cold as in exercise or in the troubles in obtaining fire-wood and burning a fire or in purchasing a blanket by the exchange of something he has produced. The only difference between the first two and last two methods is that in the former case the flesh and bones belong to the sufferer and are spent only at the time of suffering while in the latter case these may belong to any other person and may be spent at some other time prior to the suffering. Thus one using the first two methods owes nothing to any body nor is he bound to make provision for others but one using the latter method owes a debt to the person whose tissue has been used and must leave similar legacy to others. God **शंकर** is a model of the first type and **विष्णु** is a model of the second.

यज्ञ being thus a mere exchange or purchase of the desired object it is but natural that there should be rules about the 1. time, 2. place, 3. materials and 4. method of doing this. In the Bazar when one wants to exchange any thing for any other thing he has to observe these rules. The coin one pays must fulfil certain conditions as to size, weight and fineness and must be paid at the stipulated time. **यज्ञ** and **दान** are in no better position than a purchase. **यज्ञ शाला** is a place in which **यज्ञ** ceremonies take place.

देवतोद्देशेन स्वार्जितद्रव्यस्यत्यागो यज्ञः ।
यज्ञार्थशाला यज्ञशाला । आपस्तंब सूत्र

A **यज्ञशाला** therefore has to fulfil certain conditions as to 1. time, 2. place, 3. materials and 4. disposition and in this paper it is intended to describe what these conditions are

1. time

उदगयन आपूर्यमाणपक्षे पुण्ये नक्षत्रे पूर्वाण्हे ।
श्रौतसूत्र ।

For an exchange to be profitable time of rise is better than a time of fall. The rise and fall of all things in

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tihe world are relative positions with respect to the lowest point. The lowest point of the world is described in योग वासिष्ठ as under :

अखतंत्राः प्रधावंति पदार्थाः सर्वएवयद् ॥
ब्रह्मांडे पार्थिवो भाग स्तदधउर्ध्वं मंतरा ॥
योगवासिष्ठ ।

The point towards which all objects im the world are drawn as if captives is tlhe lowest point and any point away from this is higher. Thus there is only one low point while other directiions are the hundreds of lines emanatiing from this point. This is described im यजुर्वेद as

दःशप्राचीर्दशदक्षिणा दश प्रतीचीर्दशोदीचीर्दशोर्ध्वाः

There are tens of Easts, Souths, Wests, Norths and upwards.

When we think of the whole world the center point of ब्रह्मा is the lowest point and when the solar system is near this point it is low and when it is away from this point it is high Im कृतयुग the solar system is high or im its ascendent and in कलियुग it is in its descendent.

In the solar system the center point of the sun is the lowest point and any thing when near it is low and when away from it is high. Planets when they are close to the sun are said to be नीच low and when away from it उच्च high. Our earth is नीच in the cold weather दक्षिणायन and is उच्च in the hot weather उत्तरायण or मकर to कर्क संक्रमण

The moon when full is away from the sun and is उच्च while on अमावास्या it is near the sun and is नीच. The bright fortnight is thus the rising fortnight and the dark fortnight the falling fortnight.

On the earth the earth's center point is the lowest point and any thing away from it is higher. Thus when one descends in a pit one is going down and when one ascends a hill one is going up.

From morning to noon and from evening to midnight are therefore rising times and from noon to evening or from midnight to morning are falling times.

Thus the most propitious times for a यज्ञ or exchauge are कृतयुग, उदगयन शुक्लपक्ष पूर्वाह्न or पूर्वरात्र as these are the rising times for discharging debts. On the contrary कलियुग, दक्षिणायन, कृष्णपक्ष अपराह्न are not the proper times as these are falling times. For दैवकर्म rising times and for पितृकर्म falling times are most propitious and should be adopted.

In the same way when the brighter Stars such as पुष्य, चित्रा, स्वाती, श्रवण are rising that is the proper time.

यान्येवदेवनक्षत्राणितेषु कुर्वीत । ब्राह्मण

It will thus be seen that our शास्त्रकार are very reasonable in choosing proper times for the religious works that are ordained to be done.

2. Site.

(१) अनूषरं अविवदिष्णु भूम,
ओषधि वनस्पति वच्च ।

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कंटाकेक्षीरि णस्तुसमूलान्,
परिखायो द्वासयेत् । आश्वलायन ।

(२) समंलोमशं अविभ्रंशि ।
प्राच्यउदीच्यो वा यत्र आपः प्रवर्तेरन् ।
अणोरिण्यो कंटका अकटुकाश्च,
यत्र ओषधयः स्युः । गौभिलगृह्य ।

(३) समेरमणीयेदेशे । श्रौतपदार्थ निर्वचन ।

(४) शुचौ समेदेशे । बौधायन गृह्यपरिभाषा ।

(५) खतः कृष्ण मृगैर्युक्ता कुशआशैरलंकृता ।
वेदविद्भि र्द्विजैर्जुष्टा यज्ञीयैस्तरुभिर्वृता ॥१॥
प्रागुदक्प्रवक्षा रम्या प्रभूतसलिलाशया ।
नीरंध्राचैव सुस्निग्धा समित्पुष्पफलान्विता ॥२॥
खारामगोकुल कुला भूः सामान्या प्रशस्यते ॥३॥
गोमत्यैःफलपुष्प दुग्धतरुभिश्चाढ्यासमाप्राक्प्रवा
स्निग्धा धीरख प्रदक्षिण जलो पताऽऽशुबीजोद्गमा
साम्नोक्ता बहुपांशुरक्षयजला तुल्याचशीतोष्णयोः
श्रेष्टा मूरधम समुक्तविपरीता मिश्रितामध्यमा ॥
शिल्पशास्त्राणि ।

The site should be not-salt अनूषर, and should never अविवदिष्णु be disputed and extensive भूय and it should have herbs and plants growing on it. Plants having thorns and milky juice should be dug out with their roots and removed.

The site should be सम level, surrounded by men and animals of equal rank and even in temperature throughout the year, लामश having herbs and animals living or growing on it, अविभ्रंशी steady in foundation and not likely to be lost or change ownership.

The site should be even and pleasant

The site should have the deer growing naturally on it. The कुश and काश grass should grow beautifully on it Brahmans or thread-bearing men should live there, it should fall towards the East or North so as not to be washed off by the shower of rain that generally falls with great force from south-west, water should be plentiful in it, there should be no holes, it should be oily, it should bear trees having twigs, flowers and fruits, herds of cows should live on it with ease. Such a site is generally good.

A site that shelters cows and men, that has plenty of trees bearing fruit, flower and juice, that is even, that falls towards the north, that is oily, that gives a deep sound, which has water on its right side, where seed sprouts quickly, that is not very dusty, in which there is an inexhaustible store of water, that is even in the hot as well as in the cold weather, is good. Any site with opposite qualities is bad and any site with mixed qualities is fair.

The place where this site should be situated is specified as under.

तीर्थांते तटिनीतटे, जलनिधे स्तीरे, सरित्संगमे ।
शैलाग्रे ऽद्रितटेवनोपवनयोरुद्यानदेशेतथा ॥
सिद्धाद्यायतनेषु वा गुरुवरग्रामे-पुरे-पत्तने ।
देशेऽन्यत्र मनोरमे सुरसमिज्यायैक्षितिकल्पयेद् ॥

The site should be near a तीर्थ, on the bank of a river, on the shore of a sea, at the confluence of two rivers, on the top of the mountain, on the hillside, in a forest or a field, in a garden, in the residence of hermits or saints, in a city, town or village where prominent men live, or any other country that one likes most.

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The surroundings of the site both desirable and undesirable are specified as under :—

प्लक्षन्यग्रोधनिबार्जुनवकुल कुलस्थासना-
शोकनिष्पा वाकोलैर्मालती चंपकतिलखदिरैः
कोद्रवैर्मुद्रितावा ॥ ½ ॥

शस्तामंदिरपार्श्व पृष्ठदिशितु श्रीवृक्ष विल्वा
भया । व्याधिघ्नामलकी सुलकीसुरद्रुमपला
शाशोकमालेयकाः ॥½॥

पुन्नागासनचंपकाश्च खदिरस्तद्वत्कदल्या-
दयो । जातीनागलनादयोऽपिसकला सर्वत्र
संशोभनाः ॥ ½ ॥

अर्कैर्वेणुविभीतकैः स्नुहियतैः श्लेष्मातकैः
पीलुभिः । संकीर्णाबहुशर्कराच्च कठिना गर्था-
न्विता सोषरा ॥ ½ ॥

गृध्रश्येनवराहवायसशिवा शाखामृगैः संतते ।
जुष्टायष्टुरनिष्टदानि गदिता धूम्रामही सूरिभिः॥½

भस्मांगारतुषास्थिकेश कृमिवल्मीकादिभिः
संयुता। वर्ज्यामध्यतना, सगर्भ कुहरा, विस्रा,
विदिक्स्थाशिवा ॥ शिल्परत्नाकरे।

The site should be close to प्लक्ष, न्यग्रोध, निंब, अर्जुन and वकुल, आसन, अशोक, निष्पाव अकोल, मालती, चंपक, तिलख दिर, or it should be full of कोद्रव On its side or at the back there should be श्रीवृक्ष, विल्व, अभया, व्याधिघ्ना, आमलकी, सुरद्रुम, पलाश, अशोक or मालेयक. पुन्नाग, आसन, चंपक, खदिर, कदली, जाती नागलता।

The site should not be surrounded or studded with अर्क, वेणु, विभीतक, स्नुहि श्लेष्मातक, and पीलु, it should not be very sandy, very hard, or have holes with inmates in it, it should not be frequented by the गृध्र vulture श्येन hawk वराह hog वायस crow शिवा jackals शाखामृग monkeys. Such sites are unpropitious to the person who performs the sacrifice. The site should not contain भस्म ashes, अंगार coal, तुष chaff, अस्थि bones, केश hair, कृमि insects, वल्मीक ant-hills. It should not be low in the center, it should not have holes with inmates, it should not be besmeared with flesh or situated in an odd or awkward direction.

In short the site should have plenty of useful things and should not give trouble or be troubled by others frequently.

3. Materials.

The principal parts of a यज्ञशाल are its roof and sides. Roof is the most important thing and a यज्ञशाला is called मण्डप as it मण्डंशिरोभूषणं पातीति मण्डप । protects the head from the heat of the sun. The materials used in a यज्ञशाला therefore are :—

मृदिष्टिका सुधाशैला फलकादिकभित्तिकम् ॥
हेमरत्नादिरहितं गृहं कार्यंयथाबलम् ॥
तृणैस्तु मृण्मयंछाद्यं इष्टिकामिर मृण्मयम् ॥
सातुभिर्धातु युक्तं च शिखरैर्न मंडितम्। मयमत

The walls should be made of earth, bricks, lime, stone, wood, metal or gems according to the wealth of the builder. The roof of mud structures should be made of grass, one of stone and lime should have tiled roof ; planked structures should have planked roof ; metal sheet walls should have metal sheet roofs and walls studded with gems should have pyres with gem set into them. We shall therefore treat

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of materials under these heads as regards their qualities and tests.

3. Materials.

The materials used in a **यज्ञ** or **यज्ञशाला** should be of the highest class and best quality i. e.

श्वेतं, मधुरास्वादं, पुण्यगंधं गभीरशब्दं, कोमलं च । आश्वलायन ।

It should be white in colour, sweet in taste, fragrant in smell, deep in sound and soft to the touch. The materials are to be selected and cleansed to suit the purpose as stated below.

वर्णलिंगवयोवस्थाः परीक्ष्यच बलाबलम् ॥
यथास्थानं यथायोग्यं संस्कारान् कारयेत्सुधीः
षोडशसंस्कारी ।

A thing should first be tested as to its **वर्ण, लिंग, वयः**, and **अवस्था**, and then it should be refined to suit the place it has to occupy and the purpose it has to serve.

वर्णविचार.

The consideration of **वर्ण** is based on the principle of give and take. Any thing that takes little and gives much is good and is signified by the white colour and any thing that takes much and gives little is bad and is signified by the black colour. **वर्ण** means a colour that describes the quality of a thing. There are five **वर्ण** viz. white red, yellow, blue and black and these denote the class of the thing

All things are classed under these classes. **ब्राह्मण, क्षत्रिय, वैश्य, शूद्र**, and **पञ्चम** are the technical names for these classes and they denote that the properties possessed by the colours as to the percentage of reflection of light and heat are possessed by the things classed under them. Thus **ब्राह्मण** indicates that like the white colour it reflects or gives back all that it gets from the Creator; anybody who is willing to give his all **तनु मन धन** to his fellow creatures is a **ब्राह्मण**. A **ब्राह्मण** must therefore be willing to give more than three-fourths of his property to the public. The plain living, the austere life of a **ब्राह्मण** denotes his willingness for self-sacrifice. Here **ब्राह्मण** does not denote caste but a class of things.

सद्भावे साधुभावे च सदितिप्रोच्यते बुधैः ।
गीता ।

Whatever serves its purpose best is called a good thing, similarly any thing vegetable mineral, animal or human that gives more and takes less is a **ब्राह्मण**. This will be better explained by examples of **ब्राह्मण** minerals, vegetables, beasts, animals etc. and these are detailed below.

The letters of the Alphabet are classed as under :—

स्वराश्च ब्राह्मणा ज्ञेया वर्गाणां प्रथमास्तथा ॥
द्वितीयाश्च तृतीयाश्चचतुर्था श्चापिभूमिपाः ॥१॥
वर्गाणां पंचमा वैश्या अंतस्थाश्च तथैवच ॥
उष्माणश्च हकारश्च शूद्रा एव प्रकीर्तिताः ॥
याज्ञवल्क्यशिक्षा ।

All vowels and first letters of the classes are **ब्राह्मण**, the second, third, and fourth letters are **क्षत्रिय**, nasals and **य, र, ल, व**, are **वैश्य** and **श, ष, स, ह** are

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शूद्र On looking at the coalescence rules the give and take relations of these will be apparent and the classification clearly percieved.

The earth, rather minerals, are classed as under :—

श्वेता ब्रह्मण मृत्तिका सुघृतवद्गन्धा शुभस्वादिनी।
रक्ता शोणितगंधिनी नृपतिभू. स्वादेकषायाचसा।
स्वादेऽम्ल तिलतैलगंधिरुदिता पीताचवैश्यामही
कृष्णा मत्स्यसुगंधिनी च कटुका शूद्रेतिभूलक्षणं॥
शिल्पदीपक।

The earth that is white, smells like good ghee, and tastes well is **ब्राह्मण**, one that is red, smells like blood, tastes stringent is **क्षत्रिय**, one that is yellow, smells like the oil of sesamum and tastes sour is **वैश्य** and that which is black, smells like a fish, and tastes bitter is **शूद्र**. Bricks are also classed similarly and fire bricks that are white and fireclay that is white is recommended for **अग्निकर्म**, the kilns or fireplaces.

Gravel is classified as under :—

ये स्निग्धा मसृणाकारा मृदवो लघवस्था॥
ब्राह्मणा दूषदोज्ञेयाः सर्व कर्म सुशोभनाः॥१॥
ये दृढांगाः सुगुरवस्तथां शांश विभागिनः॥
अश्मानः क्षत्रिया ज्ञेया रथ्यापादेषुशोभनाः॥२॥
मृदवो गुरवो येच स्नेहेनैव सुरक्षिताः॥
ते वैश्याः सुविभक्तांशा युज्यंते पाद पूरणे॥३॥
ये कर्करा वृतांगाश्च कर्करा ये प्रतिष्ठिताः॥
येऽत्यंतगुरवो स्निग्धा स्तेशूद्राः प्रस्तराधमाः॥४
ये कर्कराच्छिद्रमया वदग्धाः;
प्रभाविमुक्ताः परुषा विवर्णाः॥
नते प्रशस्ता गृहकर्म मध्ये,
त्याज्याः सदावैरिषुमस्तकेषु॥५॥

The gravel that is oily, smooth, round and light is **ब्राह्मण** and is useful for all works ; the gravel that is hard, breaks in flakes and is heavy is **क्षत्रिय** and is useful for road surface and foundations ; gravel that is soft and heavy, compact and well-broken is **वैश्य** and useful for foundatians only ; the gravel that is rough, the gravel that stands erect, that is very heavy and brittle these are bad and are **शूद्र** and the gravel that is full of holes, burnt, without luster, hard and bad-coloured, these are not useful in building and may be thrown at the heads of enemies.

Stones are classified as under :—

श्वेता पंकजसंनिभा द्विजशिला,
तस्याः शशी देवता।
राजा रक्तशिला कुलस्थसदृशा,
शक्रस्तु तद्देवता॥
पीता वश्यशिला तथैव हरिता,
तस्या भगोदेवता।
कृष्णा शूद्रशिला च मृत्सदृशका,
तस्याश्विनौ देवता॥ वास्तुसार।

A slab that is white or lotus-coloured (rosy) is **ब्राह्मण**, a shining-red or **कुलस्थ** coloured stone is **क्षत्रिय**, a yellow or green stone is **वैश्य** and a black and earthy (soft) stone is **शूद्र**.

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Wood is classified as under :—

लघुयत्कोमलं काष्ठं सुघटं ब्रह्मजातितद् ॥
दृढांगं लघुयत्काष्ठमघटं क्षत्रजातितद् ॥
कोमलं गुरुयत्काष्ठं वैश्यजातितदुच्यते ॥
दृढांगं गुरुयत्काष्ठं शूद्रमित्युच्यते बुधैः ॥

आगरुयमत.

The wood that is light, soft and easily wrought is **ब्राह्मण**, a hard, light, and not easily wrought wood is **क्षत्रिय**, a soft, heavy and easily wrought wood is **वैश्य**, and a hard, heavy and not easily wrought wood is **शूद्र**.

Metals are classified as under :—

Gold and silver are **ब्राह्मण**, copper and tin are **क्षत्रिय**, brass and gun metal are **वैश्य**, iron is **शूद्र** and lead is **अंत्यज** metal.

Diamond is **ब्राह्मण**, ruby is **क्षत्रिय** emerald is **वैश्य** and saphire is **शूद्र**, and coal is **अंत्यज**.

Trees are classified as under :—

पिप्पल, वट, औदुंबर are **ब्राह्मण**, **पनस, आम्र, अजकर्म्म** and **अंतःसार क्षत्रिय, बहिःसार** palm, cocoa, bamboo are **वैश्य** and **शाक चिन्ता** and **सर्वसार** are **शूद्र**, The **ब्राह्मण** trees are called **असार** and **यज्ञीय**.

Horses are classified as under :

विवेकी सघृणो विप्र स्तेजस्वी क्षत्रियो बली ॥
कोष्णभावो भवेद्वैश्यः शूद्रोनिःसत्वको भवेत् ॥

अश्वविद्या.

A horse that is thoughtful and kind is **ब्राह्मण**, one that is strong and spirited is **क्षत्रिय** A mild horse is **वैश्य**, one having no stuff is **शूद्र**.

Bulls are classified as under :

शुक्लांगाः शुचयोऽक्रुद्धा मृदवः शुद्धचेतसः ॥
अल्पाशिनो बहुबला वृषभा ब्राह्मजातयः ॥१॥
व्यक्ता व्यक्तरुषाः रुषाः शुद्धा दृढभारवहाः शुभाः॥
बह्वाशिनो बहुबला वृषभाः क्षत्र जातयः ॥
या पीतांगा मृदवः शुद्धा अक्रोधा भारवाहिनः॥
यदृच्छा भोगिनः क्षीणा वृषभा वैश्यजातयः ॥३॥
कृष्णांगाः क्रूरहृदया अपवित्राः सदाशिनः ॥
बृहद्वृषणरोषाश्च वृषभाः शूद्रजातयः ॥ ॥४॥

कृषिशास्त्र.

White, clean, mild, soft-skinned, noble-natured bulls that eat less and are very strong are **ब्राह्मण**. Bulls that have mixed colours, clean skins, strong in carrying loads, good natured, that eat much and are strong are **क्षत्रिय**. Yel low-colored bulls, soft-skinned, clean in habits, mild, able to bear loads, that eat what they get (more or less), and are weak are **वैश्य** and black-coloured bulls' wicked-natured unclean in habits, that are always eating) greedily hungry always,) that have big testicles and a strong temper (angry) are **शूद्र** bulls.

Elephants are classed as under :

विशालांगाः पवित्राश्च ब्राह्मणाः स्वल्पभोजिनः ।
शूरा विशाला वव्हाशा क्रुद्धाः क्षत्रिय जातयः ॥

हस्त्यायुर्वेद.

Large-sized, clean and content with a little food are **ब्राह्मण** Elephants. Bold, big, and angry elephants eating a large quantity are **क्षत्रिय**. Elephants are not classed as **वैश्य** or **शूद्र** but they are instead classed as diseased animals.

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Buffalos are classified as under :—

भृशंकृष्णाः पवित्राश्च वृहद्वृषण घोणकाः ॥
बहाशिनो मारकाश्च महिषा ब्रह्मजातयः ॥१॥
श्लथांगाः क्षीणशृगाश्च सुक्रुद्धा भारवाहिन :॥
अमारका बहुबला महिषा वैश्यजातयः ॥२॥
केकराः कामलाः स्थूला भृशंकुद्धाश्च मारकाः ॥
बहाशिनो बहुबला महिषः क्षत्रजातयः ॥३॥
आक्षीणा क्षीण बलाःक्षीण शृङ्गघोण रुषाश्चये॥
अल्पाशिनो भार सहामहिषाः शूद्रजातयः ॥४॥
सर्वदा जलामिच्छन्ति ये-ल्पसत्वामहौजसः ॥
भारसाःकुङ्गाश्चतेत्यजा महिषामताः ॥

कृषिशास्त्र.

Very black, clean, having large testicles and noses, eating much, and not passionate, such buffalos are ब्राह्मण; loose-bodied, weak-horned, passionate, able to bear loads, not thrusting with horns, and strong, such buffalos are वैश्य; squint eyed, lustful, big, very passionate, trying to thrust, eating much, very powerful, such buffalos are क्षत्रिय; Buffalos weak in body and power, whose horns and noses are (small) weak, that eat less, that bear burdens, are शूद्र buffalos, and buffalos that always like to sit in water, that have little stuff, large body, that bear beating, have bad horns, are worst buffalos.

Dogs are classified as under :—

शुभ्रादीर्घास्तथ्वकर्णा लघुपुच्छास्तनूदराः ॥
सुशुक्लनखदंताश्चश्वानस्ते ब्रह्मजातयः ॥१॥
रक्तांगास्तनुलोमानो ललत्कर्णास्तनूदराः ॥
दीर्घादीर्घ नखरदाः श्वानस्ते क्षत्रजातयः ॥२॥
ये पीतवर्णा मृदव स्तनुलोमानः ॥
क्रुद्धाक्रुद्धा ललज्जिह्वास्ते श्वानोवैश्यजातयः ॥३॥
कृष्णवर्णास्तनुमुखा दीर्घरोमाण एवच ॥
अक्रुद्धाः श्रमयुक्ताश्च तेश्वानः शूद्र जातयः ॥४॥
लघुप्रमाणास्तु गुरूदयाये ये मेध्यभक्ष्या बहु पुत्रकाश्च। प्रवृद्धपुच्छालघुसूक्ष्मदंतास्तेचांत्यजाः कुक्कुरजातयःस्युः ॥

Dogs that are white, long, have erect ears, short tails, thin bodies, very white teeth and nails are ब्राह्मण; Dogs that are red in colour, thin hair, long ears, thin bodies, long nails and short teeth, are क्षत्रिय; dogs that are yellow in colour, soft in hair, short haired, either passionate or not, with hanging tongue, are वैश्य; dogs that are black, short-headed, long-haired, not passionate, easily fatigued, are शूद्र; and small dogs, tall in stature, that eat dirty things, that breed profusely, have very long tails, sharp and small teeth, these are very bad dogs.

Sheep and goats are classified as under :—

सूक्ष्मरोमासुखस्पर्शो कोमकांगस्तु योभवेद् ॥
ब्रह्मजातिः स विज्ञेयो वस्त्रंचास्यगुणोत्तरं ॥१॥
स्थूलरोमा मृदुस्पर्शः क्षत्रियः सोऽपिनिर्भयः ॥
सूक्ष्मरोमाखरस्पर्शो वैश्यः स्यात्सुखवर्धनः ॥२॥
स्थूलरोमाखरस्पर्शः शूद्र संज्ञः सुखच्छिदः ॥२

The sheep that has very fine hair, whose wool is pleasant to touch, and whose body is soft is ब्राह्मण; and the cloth made from such wool is of very high quality ; one that has thick hair, and is soft in touch, and fearless in disposition

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is **क्षत्रिय**; one that has thin hair but is pleasant though rough in touch is **वैश्य**; and one that has thick hair, rough in touch and unpleasant in wear is a **शूद्र**

Planets are classified as under :

Venus and Jupiter are **ब्रह्मण**, Sun and Mars are **क्षत्रिय**, Moon and Mercury are **वैश्य**, Saturn is **शूद्र**, and **राहु** and **केतु** are **अंत्यज**

Thus all things from Alphabet upwards **वेद, शास्त्र, पुराण, विद्या, कला, नदी, तीर्थ, देव, देवता, धातु, रत्न, पाषाण, वृक्ष, पशु. पक्षि मनुष्य,** &c. are classified into these five classes and when specifying their uses it is specified that a **ब्राह्मण** metal should be used in a particular place, &c., A thing **ब्राह्मण** in **रथशास्त्र** may be **क्षत्रिय** in **वास्तुशास्त्र** and **वैश्य** in **विमानशास्त्र** according to the particular use it is to be put to and the particular quality that is valued there. For example in **वास्तुशास्त्र** an easily dressed stone is valued but in **रथशास्त्र** only hardness in undergoing wear and tear is the chief quality. In **नौकाशास्त्र** things, impervious to water, on which salt water has no, or only little, corrosive action are good, while in **विमानशास्त्र** lightness is the principal quality that is valued. For construction of carts a thing that stands rough wear or handling is best but in carving, the most delicate colour in [illegible] is more valuable. Thus a good thing is **ब्राह्मण** but it is not necessarily **ब्राह्मण** all over.

The next test is **लिंग** which means a distinctive mark. There are three **लिंग** viz., **पुल्लिंग स्त्रीलिंग** and **नपुंसकलिंग,**

पुल्लिंग A thing that is strong in compression, granular in structure, compact, uniform in breadth and thickness; steady, exogeneous, active, light and strong, fit to be a leader is **पुल्लिंग.**

स्त्रीलिंग A thing that is strong in tension, tissued and laminated in structure, tapering at one end unsteady, endogenous, passive, heavy and wealthy, fit to be led is **स्त्रीलिंग.**

नपुंसकलिंग—A thing that stands no strain, is vesicular, viscous in structure, conical in shape, very unstable, weak and heavy, unfit for any use is **नपुंसक.**

Earth, and lime are always **स्त्री लिंग.** The **लिंग** of bricks and stones are as under:—

एकवर्णा घनास्निग्धा मूलाग्रादार्जवान्विता ॥
गजघंटरवायासा पुंशिलेति प्रकीर्तिता ॥
स्थूलमूला कृशाग्रा या क्वंसतालसमध्वनिः ॥
स्त्रीशिला, कृशमूलाग्रा स्थूला षढाच निःस्वना ॥
मयमत. अ० ३३

A stone or brick that is of one colour, compact, soft to the touch, of uniform size throughout and gives a ringing sound like that of a bell tied to the neck of an elephant is **पुल्लिंग**; one

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that is wide at one and narrow at the other end, gives sound like **कंसताल** cymbols is **स्त्री** ; one that is narrow at the bottom and broad at top and gives no ring is **नपुंसक.**

The **लिंग** of trees is as under:—

मूलाग्रादार्जवंवृत्तं शाखानेक समन्वितं ॥
तत्पुंस्तवं, भवेन्मूले स्थूलं स्त्री त्वं कृशाग्रकं ॥
स्थूलाग्रं कृशमूलंतुषंढमेतदुदीरितं ॥

मयमत अ० १५

A tree that is straight and of even size, with many branches, is a male, one that is thick at bottom and thick at top is female, and one that is thin at bottom and thick at the end is neuter.

Lists of male and female trees have already been published in the Vedic Magazine under **वास्तुशास्त्र,**

There are five ages or **वयः** as under.

बालत्वं कौमारं यौवन मथवार्धकंच निधनं च ॥
पंचवयांस्येष्वंत्येनेष्टे शिष्टानि वस्तूनीष्टानि ॥

बालत्व and **निधन** are not acceptable ages while **कौमार, यौवन वार्धक्य** are acceptable.

टंकधातादिमृद्वीया मंदपक्वेष्टकोपमा ॥
शिलाबालामतातज्ज्ञः सर्वकर्मसुनिंदिता ॥
स्निग्धागंभीर निर्घोषा सुगंधा शीतला मृदुः ॥
न विलावयवा तेजः सहिता यौवनाशिला ॥
मत्स्यमंडूकशकला रुक्षा वृद्धाशिलाऽशिवा ॥
रेखाबिंदु कलंकाढ्या सात्याज्या सर्व कर्मसु ॥

मयमत अ० ३३

A stone that is very soft to dress like a half-burnt brick is **बाला** and is not useful. A stone that is oily gives deep sound, smells well, is cold to the touch, is soft, has no holes in its body, and has luster is **यौवन** and good. A stone that breaks like a fish or tortoise is rough, unpropitious, has threads or dots on it of different colours is **वृद्धा** and is useless.

The age of a tree is noticed as under :

किष्कुमात्रं तरोर्मूलं त्यक्त्वा छिंद्यात्तदूर्ध्वतः ॥
छेदेक्षीरस्रवे लब्ध्यै, जलस्रावस्तु सौख्यकृत् ॥
सबल्कलं विशेषेण सर्ववृद्धि प्रदंविदुः ॥

शिल्परत्न अ० ७४

About six inches of the stem should be left at the bottom and one should begin to cut the tree. If the juice is thick it is good, if it is thin it is fair and if the bark gets detached it is very very good.

वालुकासंचयदारुं शाययेत्पूर्वमस्तकम् ॥
नपरावर्तनं कुर्यादष्टपंच त्रिमासतः ॥ शिल्परत्न.

The timber should be laid on the sand with its head to the east and it should not be used for eight, five or at least three months.

Then the materials are to undergo the necessary **संस्कार** as already detailed in **वास्तुशास्त्रयज्ञशाला** in the Vedic Magazine Now the method of cleaning things is noted here.

वक्ष्येशुद्धिमपीह पात्रविषयां द्रव्यादिकानांतथा ॥
यावद्गन्धविलेपनाद्यवगम स्तावज्जलैः क्षालयेत् ॥
चूर्णैरप्यवघर्षयेत्पुनरपि प्रक्षाल्यचोष्णैर्जलैः ।
पात्राणां भवतीह शुद्धिरधुना शुद्धिर्विशिष्टोच्यते
सौवर्णं सलिलेनशुध्यतियथालेपापनोदोभवेत् ।
पात्रंशुल्बमयंतथाम्लसलिलै स्तारोद्भवंगोमयाद् ॥

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कांस्यंभस्मजलैस्तामणिमयसूर्यांशुभिर्वांभसा।
मृत्पात्रंदहनेन, चेदभिनवंतत्क्षणाद्दारवं ॥२॥
दाहादायसशुद्धिरेवमुदिता लौहानितत्कर्तृभिः॥
स्पर्शाद्वातुरगाननाभिगमनात्शुध्यंत्यनत्याहतौ॥
शुद्धिर्धर्मसुरज्जुवस्त्रविषये चेत्क्षारप्लवाद्।
स्याच्चालावुकवैणवेंम्बुपवनं गोपालकाघर्षणात् ३॥

All pots are purified by washing them with water until the bad smell or dirt is removed, some times the thing may be rubbed with dust or ashes and washed with hot water. This is generally applicable to all ; while the special agents for special materials are noted further on. A golden pot is purified by washing the pot with water, a copper pot is cleaned by acidous water, a silver pot is cleaned by rubbing with cowdung. Bell metal is cleaned with ashes and water, Gemmed pot is cleaned by the rays of the sun or water, an earthen pot by being reburnt, and a wooden pot if new by being further carved or polished. An iron pot is cleansed by burning, pots of other metals by being worked on the lathe, a horse is purified by touching his head, or by walking him, a skin is purified by its dressing, ropes and clothes are purified by being washed with water and washing salts, pots made of gourds and bamboos by being dipped in water, and cows and calfs by being rubbed or caressed.

4 DISPOSITION त्यागी

(a) FORM आकार

१-सर्वाण्यायतनानि चतुरस्राणि। प्राचीनमुदीचीनं वोदवसाय शालीनोऽग्नीनादधीत।
हिरण्यकेशीसूत्र.

२-समचतुरस्रा दीर्घ चतुरस्रा वा अग्निहोत्रशालाकर्तव्या वास्तु शास्त्रोक्त रीत्या।
श्रौतपदार्थनिर्वचने,

३-वामभागे च सद्मनः। नारद.

४-यत्रसर्वत आपोमध्यंसमेत्यप्रदक्षिणं शयनीयंपरीत्य प्राच्यः खंदेरन्। आश्वलायनगृह्यसूत्र.

५-चतुरस्राकृतिः प्रोक्तायज्ञभूमिस्तुशांतिदा।
शिल्पशास्त्रं.

६-मंगलेषुच सर्वेषु मंडपोगृहवामतः। सप्तपि

७-षोडशारत्निकंकुर्याच्चतुर्द्वारोपशोभितं॥
मंडपंतोरणै र्युक्तं तत्रवेदीप्रकल्पयेद्॥
वशिष्ट.

The form of a यज्ञशाला should be square or oblong with the water from the roofs on all sides to the center i.e., the shape should have an open quadrangle in the center and the वेदी or the altar should be situated in the north or east wing of the building.

दक्षिणेन विहारंदीक्षितागारे विहरति।
श्रौतसूत्राणि.

२-सत्कथावाद, पूरणश्रवण, वेदार्थविचारादीन्कालातिवाहनार्थमस्मिन् करोति सविहारः।
अग्न्यागारस्यदक्षिणेन विहारः कर्तव्यः।
सत्याषाढ सूत्र.

The altar being situated in the north or east of the block, the south side should be reserved for holding meetings for the recitations of the stories of the Good, or for hearing the mythological history, or for the discussion about the meaning of the Vedas. When the यज्ञशाला is built it should have four doors in the four sides with तोरण &c., The water in the quadrangle should pass along the south side and drain off towards the east. The यज्ञमंडप should be 16 cubits अरली square.

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वेश्मनः पूर्वभागे वेदीं कुर्यात् ॥ खादीरसूत्र.

The altar should be in the east part of the (north) wing.

(2). Arrangement.

१-गार्हपत्यायतनं अष्टादशांगुल्यावृत्तंभ्रामयित्वा, अष्टांगुलोन्नतं स्थंडिलंकृत्वा परित श्चतुरंगुलं विस्तारंहित्वामध्ये षडंगुलं विस्तारं निम्नं खनति। हिरण्यकेशीसूत्र.

२-गोचर्ममात्रं चतुरस्रं स्थंडिलं गोमयेन उपलिप्तं भवति। तस्य मध्यत उद्धृत्य, अवोक्ष्य, अरलिमात्रं समचतुरस्रं स्थंडिलं करोति।

बौधायनसूत्र.

३-कुंडं प्रशस्तं चतुरस्रमाद्यावश्वत्थ पत्रं च तथार्धचन्द्रम्। तद्वालिकोणं त्वपिवर्तुलंच षट् कोणकं पद्मयथाष्टकोणम् ॥ शिवगुरुदेवपद्धति.

The कुण्ड for the गार्हपत्यग्नि the House-holder's fire, should be marked by drawing a circle 18 अंगुल in diameter, it should be 8 अंगुल high ; a pit 6 अंगुल deep is dug in the center of this कुण्ड. It may be a square or of the shape of the leaf of अश्वत्थ semicircular, triangular, circular, hexagonal, of the shape of a lotus or octagonal according to the purpose for which the sacrifice is performed. In हिरण्यकेशीशूसूत्र, प्रश्न २८ the various objects and the various shapes of the altars are detailed.

Construction.

The first thing to be done in constructing the यज्ञशाला is to mark out the directions. The process of marking out these by means of the Pole Star, the Sun or the Stars नक्षत्र like श्रवण &c., is detailed under वास्तुशास्त्र.

1. Lining out—

तत्सहस्रसीतं कृत्वायथादिक्सम चतुस्रं आयत चतुरस्रं वामापयेत्। तत् शमीशाखया उदुंबरशाखया वाशतां तोयेन त्रिः परिव्रजन् प्रोक्षति। अविच्छिन्नया चोदकधारया 'आपो हिष्ठतितृचेन। आश्वलायन.

The ground should be well ploughed a thousand tines and then on this a square or oblong facing the exact east should be demarcated. This should be sprinkled with water thrice with a branch of शमी or उदुंबर while reciting शतांतोयसूक्त viz., the सूक्त beginning with शन्नइन्द्राग्निम् &c. The form then should be marked by a continuous water line while reciting the आपोहिष्टा सूक्त,

2. Filling in foundations—

मध्यमस्थूणायागर्तेऽवधाय प्राग्रोदगग्रान् कुशाना स्तीर्य वंशांतरेषु शरणानि कारयेद्। गर्तेषु 'अवकांशो पालं' चावधापयेत्। व्रीहिय वमतीरय आसेचयेद् "अच्युतायभौमाय"स्वाहा ॥ इति। आश्वलायन.

After the foundations are dug they should be tested as already noted under वास्तुशास्त्र by filling the pits with excavated earth and water and then in the central pit दर्भ should be spread with अवका mass and शंपाल a plant named निरगुडी in Marathi and the foundations should be filled as usual. In filling the foundations water of

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ब्रीहि and यव (gruel) should be sprinkled while reciting "अच्युतायभौमाय स्वाहा." The अवका and शीपाल are spread to stop the appearance of white ants and the gruel for strengthening the foundation masonry.

3. Raising Posts.

अथैनां उच्छ्रयमाणां अनुमंत्रयते ।

"हैवतिष्ठ निमितातिलिवला स्तामरावतीं मध्ये पोषस्य तिष्ठतीं । आत्वाप्रापन्नघायव आत्वाकुमारस्तरुण आवत्सोजायतां सह ॥ आत्वापरिश्रितः कुम्भआदध्रः कलशैरयन् "॥

इति आश्वलायन.

When raising walls or posts the verses noted above should be cited.

4. Covering with roof &c.

वशमाधीयमानं अनुमन्त्रयते । आश्वलायन.

" ऋतेन स्थूणामधिरोह वंशद्राधीयं आयुः प्रतरंदधाना " इति

When putting up beams and roof the above noted सूक्त should be repeated.

(*a*) Building a cistern अस्मिन्नपआसेचयेत् "ऐतुराजावरुणोरेवरीभिरस्मिन्स्थाने तिष्ठतु मोदमानः ॥ इरांवहंतो घृतं उक्षमाणां मित्रेण साकं सहसं विशंतु ॥ इति

When letting in water in a cistern the above noted verse should be cited.

(*b*) Drainage work सदूर्वासुचतसृषु शिलासुमणिकं स्थापयेद् । " पृथिव्या अधि संभवा " इति.

" अरंगरोवावदीति त्रेधांबद्धोवस्त्रया । इरामुह प्रशंसन्ति अनिरामवबाधताम् " इतिवा ।

The drainage gutter should begin with a pit-fall of four stones set with frame दूर्वा and when letting in water either of the above two सूक्त should be recited.

5. Opening ceremony. At the end the building is to be sprinkled with water and surrounded by an unbroken line of water as noted in lining out.

ब्राह्मणान्भोजयित्वा " शिवंवास्तु शिवंवास्तु " इति वाचयीत्

The owner should feed the ब्राह्मण and make them say "शिवंवास्तु शिवंवास्तु"

The above process ordained in आश्वलायनसूत्र is also recommended in the वास्तुशास्त्र as under :

भूवन पुरपतीनां सूत्रपूर्वमाद्यः कथित इह पृथिव्याः शोधने च द्वितीयः तदनुमखनिवेशे स्तंभरोपणेच भवन काले पंचधावास्तु यज्ञः ॥

शिल्पदीपक.

While building a house the owner should perform यज्ञ five times as noted below :—

(1). A यज्ञ for obtaining the permission of the king, forester and the Local body before lining out.

(2). And at the time of testing foundations.

(3). One at the time of setting up a door in wall.

(4). One at the time of erecting the post and roof and.

(5). The last at the time of occupying it.

सत्याषाढ in his सूत्र gives two more मंत्र to be recited at the time of setting up a door frame (the main entrance

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"इहैवध्रुवां निमिशालां क्षेमेतिष्ठघृतनुक्षमाणाम्"
"तांत्वाशाले सुवीरा अरिष्टवीरा अनुसंचरेम॥"
इति दक्षिणां
"इहैवध्रुवाप्रतितिष्ठ शाले अश्वावती गोमती सूनृतावती ॥"

" ऊर्जस्वतीपयसाविन्वमाना उच्छ्रयस्वमहसेसौभगाय॥"इति उत्तरां द्वारस्थूणांउच्छ्रयति

The south post of the door frame is sset by the first and the north post by tthe last मंत्र.

The room for the congregation and tthe वेदासन should be in the south wing cof the quadrangle. The table should be made of उदुंबर wood, with four paws of tthe loin for feet and the top of the back should have the lion's face depicted on it.

समचतुरस्रं पीठं देवानामासनं प्रोक्तम् ॥
अष्टांशाधिकदैर्घ्यं द्विगुणायतमेवउच्छ्रयंच ॥
सिंहेभभूतवृषयुग् तन्नाम्नाभिधानंस्याद् ॥
नानाचित्रसमेतं सुगृहार्चन पीठमेवमिदमुदितम् ॥
न्यग्रोधोदुंबरवट पिप्पल बिल्वामल सारदारुमयम्॥

The seat for the देव and (a thing to be worshipped) should be square, its length and the height should be twice the breadth. The legs should be like those of a lion, elephant, horse or bull and the name is given according to the legs as सिंहासन, इभासन भूतासन or वृषासन. This may be decorated with pictures (or carvings) of various designs and then it becomes the best thing for worship. The wood to be used for this should be न्यग्रोध, उदुंबर, वट, पिप्पल बिल्व. This wood should be hard and clean (free from knots and cracks).

A PLEA FOR UNITY—FROM A HINDU'S STANDPOINT.

We, Hindus and Muslims, are ordained to live together. If we can live peacefully and amicably, both the communities will be the better for that; if not, both shall be the losers. The Hindus are rooted down to the soil with a hundred roots as the native Banyan tree; for Muslims, it is useless now to think that they form a caravan party (as a distinguished Muslim M.A. LL.L. B. said). The caravan, they should remember, definitely and for ever crossed over the Hindukush through the passes long long ago. No country is now prepared to receive them back. No father, no mother, no children, no friends await their return. Nobody is casting 'Longing lingering looks' towards them. They now care of the Indian soil and India is their mother. Let our fellow-Muslims realise this. Both the communities should try to understand each other's standpoint. If the Hindus do not listen to what their Muslim brethren have to say, they are doing nothing to solve the problem and are unnecessarily, nay, sinfully, adding to the woes of mother India. If the Muslims adopt an uncompromising attitude, if they do not try to understand what the Hindu has to say against them, they are doing no better and are liable to the same charge.

Truth always helps in the solution of a problem, a clean shrift always makes simple living. Setting aside all extreme demands, I will try to put forward dispassionately the grievances the Hindu has against the Muslim and will then request all enlightened Muslims to consider how

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far they are reasonable and what their community is doing to remove them.

The Hindus feel to be true (though they may have never read it) what V. Smith says in his history of India that an Indian Muslim is more in sympathy with his Persian or Arabian fellow-Muslim than with his Hindu neighbours; nay, far from being in sympathy with them, an average Muslim is positively hostile to them. There are, no doubt, exceptions but they are few and far between. It may be said that a Hakim Ajmal Khan or a Dr Ansari does not at present represent the attitude of the average Muslim, at least in the Punjab where they had a chance of showing their real selves, being in a majority in this province.

Unfortunately events wholly support what he thinks. The Hindu had practically forgotten past history but the events in the twentieth century have refreshed his memory of them.

It is one thing to issue a statement and tell the people that it is useless to harp on the event of Malabar and Multan, but it is quite another thing to convince them that those sad events will not occur again. The Hindu has a right to ask the leaders to tell him what the Muslim community has done or is doing to make such occurrences impossible.

Forgetting, it is well to bear in mind, can never be one-sided, both the parties must aid in the task; where the victim, must be prepared to forgive and forget, it is also necessary that the aggressor must show that he is sorry for his past conduct and will give no cause for such just indignation again. Taking past history into consideration, it is a debt due to the Hindu from his Muslim brother that he (the Muslim) should show deep sympathy, warm affection and great tenderness towards him (the Hindu), as an atonement for the disgrace, the humiliations, the tortures and persecution to which he has ever been subjected since the 12th century, so that all memory of such wrongs may be effectively and for ever wiped out. I feel positively sure that had Muslims been the sufferers at Multan or Malabar, the Hindu community would have overwhelmed the Muslims with sympathy, the Hindu leaders, the leaders of that ever submissive and yielding community, would never have rested until they had, made up at least their (the Muslims financial loss, until they had retrieved the mistake that could be retrieved. In view of all this may not one appeal to the Muslims, to look into their hearts and tell the Hindus whether or not they (The Hindus) are after all justified in asking of their Muslim brothers why all submission is demanded from them, when it can not be shown in all history down to the present times (except in one or two minor cases) that they have ever taken the aggressive against them.

When the Muslim Community has taken no steps to retrieve the cruelty perpetrated by certain members of it, not on personal grounds but through mistaken religious zeal, it is but natural that the self-preservative instinct should revive in the Hindus. It has not awakened all too soon. It has taken seven centuries to do so, it has required extraordinarily sharp goads to rouse it into consciousness, goads one hundredth part of which would have stung a living organism into life long ago. The Sanghatan is no menace to you, the Muslims. It looks like a menace or retaliation, because the movement is started by a community with which *disruption* rather than *organisation* has been the rule. It ought to cause no alarm amongst sound-minded and intelligent Muslims, because it is meant to strengthen their neighbours. A strong neighbour saves one much temptation to do wrong. A strong neighbour is a great blessing, a great inducement to keep your house in proper order. A weak neighbour is the cause of weakness for all. A living Hindu Society feeling and working for all its members need not terrify the Muslims. Hindus are bred in the doctrines of religious toleration. Religious persecution is foreign to their nature. If they have

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expelled a religion from the Indian soil. it was not with physical but intellectual force that they did so. If our Muslm brethren are fully convinced of the truth of their religion, why should they dread even their intellectual force in matters of religion ? Let the Hindu work to spread his religion as the Muslim may work to spread his. The just complaint of the Hindus is that their Muslim brethren oppose intellectual persuasion with threats and frequent use of physical force. Let them avoid this and all grounds for complaint vanish. Is it then too much to ask from all intelligent Muslims that they would take active steps to educate their fellow-Muslims in the ways of religious toleration ? It is now time to give up the old world practice of shaking your fists at those who do not subscribe to the same religious doctrines with you. This might have succeeded in the past but it has no chance of success now.

The root cause of thepresent Hindu-Muslim tension of feelings is to be discovered in the severe wounds inflicted by Multan and Malabar. Mian Faxal Husain's policy has only helped to deepen and widen the gulf. Because of Mian Fazal Husain's policy the Punjabee Hindu now finds himself attacked at every quarter and in every direction. He finds how grossly the principle of communal representation is being abused. It is a principle meant to protect minorities but in the Punjab he finds it employed to assert to the uttermost limit the supremacy of the community numerically strong. Here the Muslims ought to have stood up for total exclusion of Communal representation, but strange to say the role has here been inverted and it is the minorities that are pleading for the renunciation of this obnoxious principle. The Muslims, may not one say in all fairness, have here given proof of a not generous or wise mentality by exploiting the circumstances of their numerical strength. The way to rise is not to keep others down but to elevate yourselves to their height or level. To handicap your rival in the race and then hope to win it is not a creditable, much less, a noble thing. Ultimately it will not make for national or even communal progress. I, for one, do not understand the argument that at present this obnoxious principle and practice are necessary, as if evil is at any time necessary in God's world. Can any man tell us when the time for its ceasing will come ? Communal representation is not the way to rasse the Muslims intellectually. Facilities can be provided for this purpose without resorting to this bad principle and without doing injustice to the Hindus and Sikhs. If the Hindus are debarred from government service, it does not mean that the Hindus will cease reading, will give up exercising their brains in other directions. Refusal to give government posts to Hindus does not mean that the Hindu brain will stagnate while the government posts will necessarily develop the Muslim intellect. The Hindu brain will find exercise in some other sphere. If both continue to progress intellectually when will the time come when it would be said that the inequality in intellectual attainments has vanished ? The evil of all such obnoxious and intrinsically wrong methods is that when one becomes used to them, one at no time thinks that one can do without them or their necessity has ceased. The natural tendency is to perpetuate such practices. They soon create vested interests that prevent their being dropped at any conceivable future date.

The hard truth is that the way to progress, intellectual or of any other kind, is the old high road of 'Fair field and no favour'. Honest and humane competition will do more to elevate all the communities than this wrong and evil practice. May one pertinently enquire if the Muslims did not practically hold all the Government posts for some five hundred years? The Hindus held very few posts and yet it has not necessarily meant the intellectual decay of the latter. Let us

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once for all realise that the true estimate of our rival's strength and capabilities and the genuine desire to come up to or surpass him by all *fair* and *legitimate* means by strenuous self-exertion and not by artificially pressing him down can alone lead you to betterment. Stilts are not legs. They fail you after a few yards.

It is difficult to understand those who say that these questions of communal representation and *shudhi* should be postponed for an indefinite time, till we get Swarajya. You can no more suppress or carelessly set aside the problems that naturally crop up than you control an earthquake or ask the sea to stand still. Humanity is not so simple a mechanism. While you are busy in achieving one object swarms of other problems more or less connected with the main one are sure to arise and wisdom requires that they should be solved as best as you can and they should not be shirked. You did not intentionally raise them, you can as little suppress them. Let us approach these problems without undue bitterness, in a spirit of sympathy and love, realising that we are ordained to live together, that our quarrels only strengthen an alien third party, that we are Indians above all and sons of one and the same God. Let us not resort to temporary make-shifts that do not remove the evil but only give it time to grow.

"THE HOLY GRAIL"*

(By Princess Karadja.)

There are various versions in existence concerning this beautiful legend. It has been entirely ignored by the Church. We are acquainted with it through the writings of Germans and French mystics, such as Wolfram von Essenbach and Christian de Troyes. It is also intimately blended with all the legends concerning King Arthur and the Round Table. The subject has lately been dealt with in a masterly manner by the great English mystic, Wilmshurst.

The Holy Grail is generally supposed to be the Sacred cup used by Our Lord Jesus Christ at the first communion, or the Vessel into which the Blood and Water flowed at the Crucifixion. Many poetic legends relate how a Sacred Vessel was providentially preserved all through the ages. It was supposed to be kept at Monsalvat (the 'Mountain of Salvation') in the Pyrenees, and its custodian was a mythical being referred to as "The Mutilated King". He suffered from a wound in the groin, inflicted by the Sacred spear which had been wrenched out of his possession by the magician Klingsor. This story of the wound in the groin, (which has a counterpart in the Greek legend of Adonis, and the Egyptian myth of Osiris), obviously refers to the Fall of Humanity, and the loss of the faculty of Divine procreation, viz: *power to create new souls*. The Spear and the Cup symbolise the male and female aspect of Divine nature, i. e., WISDOM and

* Extracts from a lecture delivered on May 10th 1923 at 51, Lancaster Gate, London.

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LOVE. Through the unworthiness of humanity, WISDOM has been entirely lost. and LOVE in its highest aspect has vanished out of sight and can only be perceived by those who are pure in heart. This is implied by the fact that the Knights fell asleep when the Grail appeared, just like the disciples in the Garden of Gethsemane, who were unable to remain awake when the cup appeared to our Lord. In modern psychological language we would say that the aspirant failed to keep his day-consciousness when he attempted to use his higher vehicles in getting into contact with higher planes.

The cup was supposed to be carried by a Virgin attended by twelve Maidens. This obviously refers to the great mystery of Regeneration, or the birth of the Christ-principle in a purified heart. The twelve Maidens are the complement of the twelve Apostles and joint servants of the Divine Life.

In some old manuscripts the Sacred cup is called" San Greal " i. e., Holy Grail. It is some times spelt "Sang Real", which would mean " Royal Blood ", and convey the conception of the sacred blood which cleanses the sins of humanity.

In many legends we find the tradition of a broken Sword connected with the grail. This broken Sword has to be re-welded. This signifies that our own nature has to be harmoniously reconstituted and balance restored between the male and female aspect. The firm, unflinching handle, i e., the male aspect, must be indissolubly reunited to the flexible, tempered blade, i. e., the female aspect. The Handle of the Sword corresponds to *JUSTICE* the blade to *FORTITUDE*, and the Point to Divine *MERCY*. These " Three are one ", and represent humanity reconstructed in the Divine Image. In the Arthurian Legends, the name of the Mystic Sword is " Excalibur.

At the side of King Arthur there was a seat that was always left empty. It was called "The Perilous Seat ". He, alone, can dare to occupy it who, through a long process of purification, has attained to perfect equipoise. Ecstacy, or ascent to a higher level of consciousness, is perilous for those who are not deeply anchored in humility. For the unregenerate ecstacy too frequently ends in death or insanity.

In certain old legends the Grail is called " Lapis Coeli " i. e. the " Stone from heaven ". The statement that it is a *Stone* and not a *Cup* corroborates the connection that the legend refers to a spiritual truth, and not merely to a physical fact. " Lapis Coeli " is the " Corner Stone " needed to complete the Temple " not built with hands ".

All the fantastical stories asserting that the downfall of Empires has occurred through the loss of a Sacred Cup, are exoteric and deal with *results* and not with *causes*. The downfall of a race occurs through spiritual deterioration, and not through the loss of a physical object (however sacred that may be). There are Egyptain legends concerning a Sacred Cup dating long before the incarnation of our Lord Elijah, who later was reincarnated as John the Baptist, was the custodian of the Holy Vessel among the Essenes.

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We are all vessels made by the hands of the Potter; some are still vessels of dishonour. unconscious of their high destiny. Others are willing to be broken to shivers so that the crystal Cup containing the Divine Essence,now hidden in the depths of their being, may stand revealed in all its glory,

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THE INDIAN SILPA SASTRAS OR MANUAL ARTS.

(BY M. A, ANANTHALWAR B. A., A. C. E., B. C. E., ENGINEER AND ORIENTAL, ARCHITIECT, MADRAS.)

The old Barathakhanda or what is at the present day known as India is fortunately for her, coming to be acknowledged by searching Historians, Archaeologists and Geologists, both of this country and abroad, as a land of great antiquity even earlier than Babylonia or Egypt and that she had very high and advanced kinds of literature and philosophy of her own to which the learned classes paid great attention. Side by side with it, the other classes, the workers, were practising Arts and Industries of various distinctions which would stun even the modern day students of Western culture. There have been in days of old several Universities organised, patronised and financed by the Ruling Chiefs of old which taught many of the Arts. All such died out with the conquests and the subjugation of Indian Rulers by foreign hordes. There came to be no more patronage, no more schools and no more study of the Arts or their practice. The books or the palm plate manuscripts from which the subjects are taught were mostlyin Sanskrit and other languages and dialects which have practically died a natural death by sheer neglect and by decay and if there still remained any after peace was restored in India, they are either frequently undecipherable or are not understood.

An insight into the Indian arts shows that there were thirty-two Sciences and sixty-four Arts * or Manufactures which the Aryan Students of old were expected to study and specialize in their respective Gurukulas or Colleges according to their individual tastes.

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* I found the following list of manufacture of Art during my stuy of an Ancient Work and besides these, there are many references to other works and authors to indicate that quite a varied number of professions existed and were practised in the early days.

The Arts of Manufactures are as catalogued in an Indian work (Vide "*INDIAN ARCHITECTURE*," Vol. 1, pp. 28-30. Foot note).

(1) Gesticulation or expressing thoughts and emotions by bodily movements and gestures. (2) Theory and practise of music and musical instruments. (3) Adorning men and women with clothes and ornaments. (4) Knowledge of various forms and transformations. **(5) *Making seats and beds; beautifying them*; the preparation of garlands, and bouquets. (6) Games of chances as chess, dice, backgammon, draught etc. (7) The theory and practice of medicine. (8) Distillation and mixture of honey and various kinds of

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Of these, under the head of *SILPA SASTRA* come most of these Arts or Industries, but without limiting the scope of Silpa for the present to the mere Art of Building, and the allied Sciences which go to bring about a really substantial. beautiful and inspiring building (which may be indicated though inaptly by the English word '*ARCHITECTURE*') the subject of Silpa cannot be taken up. The study of the Materials available for construction, their origin, their growth and properties is quite essential as a first branch of Silpa and for that the study of sciences connected with soils including stones and limes, of timber, of metals and many other ingredients which go in the formation of buildings, has to be made. These come under the head of sciences known in Western science as *Geology*, *Botany*, and *Mirerology*.

The best and strongest specimen of each material should be ascertained and selected in the making of the several articles which are required in the building in order that such may last long and be useful.

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liquors and drinks. (9) Extraction of arrows and other missiles from the body; the healing of wounds. (10) Mixing various juices and essences; the art of cooking. (11) Horticulture and the raising and crossing of plants, flowers and fruits; producing the above out of their season. **(12) *Breaking and pulverising rocks, stones and metals.* (13) Extracting various drinks from the juice of the sugar-cane. (14) Mixing medicinal drugs, roots, leaves and plants. (15) Mixing and analysing the above.—using them separately before mixture. (16) Extracting salts. (17) Archery and the various movements pertaining thereto. (18) Wrestling and boxing. **(19) *Projection of engines and missiles at a fixed and a moving object.* (20) The marshalling of troops to the music of martial instruments. (21) Fighting from chariots or from horses, elephants and camels. (22) Propitiating the powers of nature by various postures and mystic gestures. (23) Driving the chariot; training the horses,* elephants and camels in various gaits. (24) *Modelling vessels from clay, wood or stone.* **(25) *Painting* **(26) *Laying out reservoirs, canals, tanks aqueducts, roads and palaces.* (27) Manufacture of musical instruments, life and mechanical apparatus. **(28) *Mixing colours.* **(29) *Bringing together water, air, and fire, depriving them of their properties.* **(30) *Building of chariots, conveyances, boats, ships and other marine craft.* (31) Spinning. (32) Weaving. (33) Knowledge of games. **(34) *Assaying gold, silver and other metals.* (35) The production of artificial gold and gems. (36) Inlaying with gold and silver; electroglating. (37) Tanning. (38) Skimming and embalming animals. (39) Milking churning and melting. (40) Tailoring and embroidery. (41) Swimming in lakes, rivers and sea. (42) Cleaning houses and vesels. (43) Bleaching clothes and removing stains. (44) Shaving cutting and dressing the hair. (45) Extracting oil from sesamum. (46) Adapting one's self to the moods and fancies of others and bringing them under our power. (47) Agriculture, its theory and practice. (48) Climbing up trees. (49) Manufacturing of articles with bamboo or grass. (50) Manufacture of glassware and porcelain, **(51) *Construction of water lifts, suction pumps, tube-wells, sprinklers, Jets, fountains, sprays etc.* (52) Manufacture of enginess of war and weapons of offence and defence, (53) Saddlery for horses, elephants and camels. (54) Rearing of children, treatment of their diseases, training them in sports and games. (55) Punishment of criminals and offenders. (56) Caligraphy of various scripts, and illuminating manuscripts, (57) Preparation and prsservation of beetal leaves. The rest are not stated.

**thus marked and Italicised come under the scope of *SILPA SASTRA* or Science of building.

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To ensure beauty of form or style in construction, the study of Drawing-Geometrical and Freehand, Painting, Modelling and Sculpture, as required, Woodcarving is quite essential ; and in addition to these two which are common among British Architects, there is one other element which was considered most essential in old India, but which is held obsolete and even absurd in respect of Architecture or Designing and that subject is Astronomy and its bearing on man and his structures or anything terrestrial. This science of Astronomy has two sections. One section indicates and explains the Planets and the stars of the Celestial globe with their relations to each other, which section is also to a certain extent studied as Astronomy in our English schools, but Astronomy has also another branch in it, which may be named as Astrology or Horology wherein the nature and properties of each of the heavenly bodies and their influences over each other and over all things and beings on the Earth's surface are elaborately set forth. Unfortunately for us ; we are in a period of world's time when we are taught only to believe in things or beings which or whom we can see by our eyes प्रत्यक्ष प्रमाण, One only of the five or six senses of live man born is taught to be believed. Even what we hear by the ears or feel by touch or infer by the aid of the other senses is disbelieved and that is due to the environments in which we are placed owing to the kind of education we are given. We are taught to say that what was called 'Faith' or 'Belief' in things, that you cannot see is fetish and barbarity. But the whole of Astrology, the second branch of Astronomy above referred to, has to depend upon Faith ' only as practically all the rationale or reasonings or even the laboratory work for finding out the inter relations between the Celestial and Terrestrial worlds are not found in any books now available to us. What we now find in the books dealing with Astrology are merely the results derived by the old Seers who should have worked hard and deep before arriving at them. We now have these results here and there and we are enjoined to believe such results merely on the mostly inexplicable texts we now find and to put faith in. The modern mind trained to analyse and find reasons and basis for everything, revolts against such a faith and thus it is that that section of Astronomy Viz., Astrology is not brought under practice except by some of the Silpis and Jyothishis who build Temples or religious works or advise for them. Even, now, there are many Indians in the Hindu Community who invariably consult the Astrological effects of building on any particular *Vastu* or building Site and enquire what dimensions of buildings and rooms would suit their respective *Janma Nakshatras* or stars of birth and the positions of their Planets in their Horscopes. I speak from personal experience. There were many occasions on which I had been consulted to compute the dimensions which would suit the Builders' stars and the Horoscopic positions of the Planets. Even for large projects of Town-Planning, they consult the Silpaic-Astrology. In fact, in one instance, for designing new Scheme for a Town-plan on the Hills near Hardwar, I was asked to consult the *Ayadhi* and other *Lakshanas* for the new town to be constructed by a very enlightened Ruler of a State there, and I had to go through a lot of elaborate Silpo-Astrological details and calculations which suited the Rajah's Horscope. It is, indeed, a pleasure to find that many modern builders consider such consultations of Astrological fitness in the matter of the constructions for their palaces or houses or even excavations of wells. In the building of towns or Temples or houses such a consultation is as much a necessity as that for the Astrological features in respect of the Janma Nakshatras of the marrying couple who are to enter into a holy matrimony. No doubt, it may be called a ' Faith ' or even 'a Blind faith ' or ' Sentiment ' or what you like. But amongst the religiously inclined class of Indians

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"All belief is for it and all arguments are against it," as Carlyle puts it. People who have built after such consultation of Astrological fitness have expressed satisfaction that they did attain in a majority off cases, the results which are said to accrue upon the following of each prescription and many have also been able to point out, that the misery or adversity found in their neighbours' or friends' houses was due to the gross violation, voluntary or otherwise, of necessary laws off building,

Without discussing the merits or demerits of such a 'Faith' or in the efficiency of the precepts of old or in the proficiency of the great Seers who have framed the laws, this additional element off Astological fitness of a house to the builder may, with impunity be consulted by every builder as much as it is necessary for him to consult the stability, strength and other details for a building or town. As long as such a consultation involves no very great additional sacrifice or personal trouble to the builder, people would do well to take to it, as they do it in the case of any number of dozes of medicine, pills or mixtures putting absolute faith in a doctor who prescribes the dozes in his diagnosis of the diseases.

By so following, the dangers or risks of non-following them may be avoided and advantages if any will be, the builders'. Very probably, there may come a time in the life of some great and patient worker, when he may have the leisure to study and reason all the precepts out and find some day a solution and rationale for what the builder of to-day adopts by putting merely a sacred faith in the efficiency and the necessity of Astrological dictations. In this view, I am sure many will agree with me and I am confident that those who cannot possibly go into the details of the many conventional aphoristic precepts of the old Seers found in different books on Silpa and Jyothisha would like to have them stated in one book clearly in English so as to follow them whenever and wherever practicable.

I propose in the following pages to dwell upon some of the important precepts as they are found in the available works as far I have endeavoured to find out, leaving the reasons for the precepts to the future researches.

WHAT SILPA SASTRA IS, AND WHAT A SILPI SHOULD BE.

SILPA SASTRA is a very comprehensive Sanskrit term used to indicate practically the Science of all the Manual Arts, including a vast region of sciences under its scope. SILPA SASTRA are two Sanskrit words, SILPA meaning Mannual Art and SASTRA meaning Science. The Shastra combines in it both the theory and practice of Silpa. Without the one the other is of no consequence. In fact, theory and practice are the two parents of every one of the sciences. 'Theory' is, in the language of a great Greek Architect of old, the result of the reasoning which demonstrates and explains that the material wrought has been so converted as to answer the end proposed and 'Practice' is 'the frequent and continued contemplation of the mode of executing any given work or of the mere operation of the hands for the conversion of the material in the best and readiest way. In fact the SILPA SASTRA comprises several Sciences which are known by different special names in each of which we find both theory and practice combined in the act of endeavouring to turn all or almost all the God-given elements in nature into the service and benefit of man.

Within the scope of this Sastra come the sciences of Mathematics, Drawing, Sculpture, Engineering, Architecture and Law, the last one at least so far as it relates to building relations with neighbours, with the Corporations of cities and of towns, it also includes Astronomy, the Science of the Laws of motions of the Heavenly Planets and of their influences on things terrestrial. The Sciences of Mechanics, Hydraulics, Electricity, Water-supply, Sanitation and Irrigation come

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under the scope of the same Sastra, as also Botany, Geology, and Navigation. There are detailed works on each of these sciences, it will be sufficient to a *SILPI* or the *Engineer* or Architect to obtain, a general and cursory knowledge of almost all of the above Sciences and more, though detailed study and practice of different branches may be left for specialisation by intending students.

Further, according to the Aryan Practice, the Silpis or the Architects should be morally of a high order and religiously inclined and learned in their respective lore. The following Stanzas occur in Vastu-Vidya in respect of conduct and qualifications of the Silpis to confirm the view.

from Vastu—Vidya Chapter I—Slokas 12 to 21.

अथवक्ष्यामि संक्षेपाच्चिह्नलिपनां लक्षणं पृथक् ।
स्थपतिः स्थापनार्हः स्यात् सर्वशास्त्र विशारदः॥२॥
न हीनाङ्गोऽतिरिक्ताङ्गो धार्मिकस्तु दयापरः ।
अमात्सर्योऽनसूयश्चतात्रि कस्त्वभिजातवान् ॥३
गणितज्ञः पुराणज्ञः आनन्दात्माप्यलुब्धकः ।
चित्रज्ञः सशज्ञः सत्यवादी जितेन्द्रियः ॥४॥
अरोगी चाप्रमादी च सप्तव्य सनवर्जितः ।
सुनामाढ्य बन्धुश्च वास्तु विद्याविद पारगः ॥५॥

According to a very old Greek Architect of the time of Julius Ceasar, much higher qualifications are fixed for the Architect and he gives reasons for the same in these words :—

"An architect should be ingenious, and apt in the aquisition of knowledge. Deficient in either of these qualities, he cannot be a perfect master. He should be a good writer, a skilfull Draftsman, versed in Geometry and Optics, expert at figures, aquainted with History, informed on the principles of natural and moral philosophy somewhat of a musician, not ignorant of the sciences, both of law and physics, nor of the motions, laws and their relations to each other of the heavenly bodies. By means of the first named acquirement, he is to commit to writing his observations and experience, in order to assist his memory. Drawing is employed in representing the forms of his design. Geometry affords much aid to the Architect; to it he owes the use of the right line and circle, the level and the square; whereby his delineations of buildings on plane surfaces are greatly facilitated. The science of optics enables him to introduce with judgment the requisite quantity of light, according to the aspect. Arithmetic estimates the cost and aids in the measurement of the works; this, assisted by the laws of Geometry, determines those abstruse questions, wherein the different proportions of some parts to others are involved. Unless acquainted with history, he will be unable to account for the use of many ornaments which he may have occasion to introduce."

"Moral philosophy will teach the Architect to be above meanness in his dealings, and to avoid arrogance; and will make him just, complacent and faithful to his employer."

"That branch of philosophy which is called the doctrine of physics, is necessary to him in the solution of various problems; as for instance, in the conduct of water, whose natural force, in its meandering and expansion over flat countries, is often such as to require restraints, which none knows how to apply but those who are acquainted with the laws of nature."

"Music assists him in the use of harmonic and mathematical proportions."

"He would, moreover, be at a loss in constructing Hydraulic and other engines, if ignorant of music. Skill in physics enables him to ascertain the salubrity of different tracts of country, and to determine the variations of climates as air and water of different situations are matters of the highest importance no building will be healthy without attention to those points. Law should

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be an object of his study, especially those parts of it which relate to partition walls, to the free course and discharge of the eaves' waters, the regulation of cess pools and sewage and those relating to window-lights. The laws of sewage require his particular attention, that he may prevent his employers being involved in the law-suits when the building is finished. Contracts, also for the works should be drawn with care and precision; because, when without legal flaws, neither party will be able to take advantage of the other. Astronomy instructs him in the points of the Heavens, the laws of the celestial bodies, the equinoxes, the solstices, and courses of the stars."

We find in another Silpa work the 'Silpi ought to wear on his body, tuft, sacred thread, the five Katchas or bindings of underwear, the upper cloth, Ear ornaments, the sacred ring, the caste mark on fore-head by Sandal, a Garland of beads for *Japa* or contemplation—the black bead called Rudraksha. He must be observant of worship of God, the daily and occasional observances of religious life. He must be learned; humble, of sound mind, and of good qualities. It is this special class of *Silpis* who should be employed on works of *Silpa*, such as temples, cities,, villages, tanks; wells, mantapas and other such works. If they are not employed in the constructions; both the King (the Employer) and the employed will be blamed and there will be room of constant disturbances in mind and tranquility to the employer and to the employed.

The Silpi should have learnt the essential teachings of the *Vedas*, the various kinds of *mantras* and *tantras* and the varieties of mudras, must be able to talk nobly, most carefully observe the caste-system and the processes of baths and other benefactory ceremonials, must possess good qualities of heart, must be happy, intelligent and discriminate, patient and high-born. He must possess the knowledge of the properties of water, of woods, of bricks, of stones, of nine metals, of soils, working of ivory, of machines and paintings."

There are innumerable works in the Silpa Sastra in India beginning from Brahma downwards to some of which reference is given thus in the Sanat Kumara Vastu.

ब्रह्मशक्रोयमश्चैव भर्गश्चां गिरसावुभौ ।
गौतमश्चैव गार्गेयोमनुव्यासो भृगुस्तथा ॥
विश्वकर्मादयश्चैव वास्तु विद्या विशारदाः ।
सर्वेथ कुर्वन् यच्छास्त्रं सारमुद्धृत्य यत्नतः ॥
सनत्कुमारो मतिमान् नमस्कृत्य स्वयंभुवे ।
वक्ष्यते तत्कृतं शास्त्रं वास्तु शोभनमुत्तमं ॥

Sanat Kumara Griha Vastu Darpana.

As far as they have been found referred to or studied by Sanskrit scholars, the following are some of the works which should be highly instructive and useful to the students of Engineering :—

Viswakarma	Composed	26,000	granthas.
Viswesa	,,	30,000	,,
Viswasara	,,	15,000	,,
Manu	,,	20,000	,,
Nala	,,	19,000	,,
Sage Manavit	,,	25,000	,,
,, Manasara	,,	15,000	,,
Bahusruta	,,	4,000	,,
Srashta	,,	20,000	,,
Manabodha	,,	36,000	,,
Viswabhodhayana	,,	50,000	,,
Ayadisara	,,	12,000	,,
Viswasara	,,	28,000	,,
Sage Parsara	,,	20,000	,,
Viswakasyapa	,,	25,000	,,
Vastu Bodha	,,	15,000	,,
,, Vidyapati	,,	30,000	,,
,, Kaladhupa	,,	30,000	,,
Sage Chitra	,,	20,000	,,
Chitraka	,,	25,000	,,
Sadhaka	,,	45,000	,,
Brahma	,,	36,000	,,
Indra	,,	47,000	,,
Saura	,,	50,000	,,
Sage Lavaja	,,	23,000	,,
Sage Saura	,,	10,000	,,
Chitraka	,,	15,000	,,

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Manasara	,,	12,000 granthas.
Sage Vastwadhikara	,,	200,000 ,,
Chitradhikara	,,	15,000 ,,
Yantradhikara	,,	25,000 ,,
Prayaschitta	,,	30,000 ,,

also Vriddha, Maya, Twashta and Manakalpa are some of the other Silpis who have also produced works of importance on temple and home Architecture.

(To be continued.)

EFFECTS OF EXERCISE.

(By Prof. M. V. Krishna Rao.)

Notwithstanding the great and essential difference between the conditions of modern life as compared with the life of the ancestors of thousand years ago, it is still true that the man of physical strength and soundness is one who, other conditions being equal wins the prizes in almost every department of human life.

Physical development is only to be obtained as the result of exercise. Throughout the whole animal world, exercise is essential to growth and development. It is a universal rule in nature that an organ which is not used, gradually wastes away until it becomes useless, and sometimes disappears altogether; while an organ that is used, develops in proportion to the amount of work required of it. Even the storm-beaten oak gains firmness and strength and increased vigor by the shakings it receives from the tornadoes which howl through its branches. Each time its massive trunk is swayed, its rootlets strike deeper down into the earth, thus not only securing a firmer hold, but providing an increased number of mouthlets through which nutriment may be received from the soil.

The blacksmith with his right arm swings a heavy hammer, while with his left he holds with a pair of tongs a heated iron, which he beats upon the anvil. In the course of a day, many thousands of vigorous blows are struck. This enormous amount of work performed by the right arm causes its muscles to grow much larger than those of the left, which are little if at all larger than those of men engaged in ordinary occupations.

Notice, on the other hand, the effect of inaction upon the arm of the Hindu devotee, which he supports in a horizontal position, and consecrates to his deity, keeping it motionless for years. In consequence of this inaction, it gradually shrivels up until it becomes a mere stick, simply bone covered with skin, the muscles having entirely wasted away.

We depend upon continued daily exercise for the ease with which we move about. If the hand is hung up in a sling for a few days, the whole arm speedily becomes almost useless. On the removal of the sling, even after so short a time as one week, the elbow will be found to be stiff, and arm rigid and any attempt to move the arm painful. We frequently find the muscles of the body in the same condition as that of such an arm when we undertake to make some unusual movement, such as bending backward or sidewise. We discover that the muscles newly called into action are surprisingly weak, and that their use, even for a short time, may be followed by soreness and discomfort for many days. When little or no exercise is taken, the whole body speedily falls into the same condition of feebleness and uselessness.

A person who for any reason is confined to his bed for a number of days, quickly

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discovers this when he first stands upon his feet, or undertakes to engage in the ordinary exercises to which he has been accustomed. He finds immediately, on assuming a perpendicular position, a strange weakness in his legs, perhaps a slight light-headache due to a sudden flow; of blood to the lower portions of the body, leaving an insufficient supply in the brain, perhaps the limbs will tingle with the increased quantity of blood sent into them, while palpitation may lead the patient to fear that he is suffering from some grave trouble of the heart, which has been heretofore undiscovered. If such a person returns to bed; as is not infrequently the case and waits for strength to come to him, he will grow weaker and weaker continually, until he may become permanently helpless. We have ferquently had such cases brought to us for treatment, sometimes on beds, from long distance. In some instances the individuals had been confined to their beds for eight or ten years, during which time they had scarcely taken a single step. Careful investigation of each case showed it to be one in which the chief fault was weakness of the muscular system, the result of disuse. By a properly graduated course of exercises, the muscular power was gradually recovered and the patient was restored to usefulness.

It is in cases of this sort that the so-called "magnetic healers," "mind healers,' etc, so frequently obtain brilliant results. Recognizing a case to be of the sort described, they profess to perform some curative act for the benefit of the patient, thereby inspiring his confidence, and arousing his hope and expectancy to the highest degree, and succeed in getting him upon his feet; and each time gaining a little strength, the muscles are soon restored so as to enable the operator to pronounce the patient cured.

BENEFITS TO BE DERIVED FROM EXERCISE :—

Exercise is beneficial in a variety of ways.

I. As we have already seen, it develops the muscles. The muscles as we have elsewhere learned, are composed of very minute fibres, each of which has the power to contract. In a muscle which is not used, these fibres become thin and pale, and lose, to a large degree, their power of contracting. In a well-developed muscle, they are large and ruddy, and possessed of a high degree of elasticity and energy. When a thin, feeble muscle is thrown into action by contraction it soon loses its pale colour, and acquires a deep red colour, through the increased quantity of blood which flows through it during its activity. The supply of fresh blood brings with it new replenishment, from which the fibres may replenish themselves. If the exercise is repeated sufficiently often to bring to the muscle an adequate amount of nourishment, the growth may continue until a very unusual degree of development has been attained.

The famous Dr.Winship, by persistent systematic exercise, succeeded in developing his muscles to such a degree that he became able to lift, by the aid of shoulder straps, fully three thousand pounds, a load which the stoutest cart-horse could scarcely stand up under. In his youth, Dr. Winship was so inferior in physical development that, when a student at school, he was obliged to bear patiently most provoking insults from his school masters, because unable to make a good physical defence. He himself said that it was this fact which gave him the impulse to undertake the course of physical culture which resulted in his extraordinary development.

2. A good set of muscles is one of the most excellent qualifications which a young man can possess. There is no position in life for which they unfit him, and there is none for which they will not enable him, and there is none which to fill to better advantage than he otherwise could do. There are a thousand and one emergencies in life in which strong, vigorous and well-trained muscles are of enormous service, and in which their use may be of incalculable value. Proper phy-

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sical culture gives, not only increased physical strength, but greater dexterity, suppleness and grace of movement. The man who walks with a shuffling swaying, and awkward gait, does so not on account of any original defect in his physical make-up but through the weakness of certain muscles which by disuse, have become unable to do their part in the act of walking, and so render him unable to perform it in an easy and graceful manner. The trained gymnast exhibits a lightness and elasticity of movement impossible to an individual who has not the benefit of physical training.

3. Proper training of the muscles also prevents or corrects curious bodily deformities, such as round shoulders, flat and narrow chests and crooked backs and gives to the body erect and graceful carriage. Many of these deformities are directly or indirectly productive of interference of the body in general through interference with the proper working of the various vital organs, particularly the lungs and hence physical culture that more simply adds to the comeliness of the body and grace of movement; it really increases the vital capability of the body, and hence lengthens life, as well as rendering it more joyous.

4. Muscular exercise not only improves the health and strengthens the muscles, but directly and indirectly effects in a favourable manner nearly every organ of the body. The muscles aid in supporting the various bones which compose the skeleton, in their proper positions. When the muscles become weak, they relax, and allow various portions of the body to drop into uncouth and unhealthful positions. It is thus that the shoulders be, through weakness of the muscles which tended to hold them back in position. The ribs, which form the frame-work of the chest, not being properly pulled forward and outward through contraction of the muscles attached to them, gradually fall inward, thus flattening the chest, and compressing those important breathing organs, the lungs, by proper exercise those physical defects may be prevented, and entirely remedied in most persons who have not yet attained middle age. Even in advanced years, much may be done to correct these physical deformities, by properly directed and systematic efforts.

5. Still more remarkable is the effect of exercise upon the activities of various internal organs. The effect of muscular exercise in increasing the action of the heart and lungs is well known. A brisk run will often double the activity of the heart, and much more than double the activity of the lungs. Although the number of respiration per minute may be only double in number, the depth of inspiration, the amount of air taken in at each breath, is also greatly increased, so that the total amount of work done by the lungs is very much more than doubled. This increased activity of the lungs produces a wonderfully beneficial effect upon the whole body.

The heart is a pump which distributes to the tissues the vital fluid by which it is to be replenished. When the heart works more rapidly and vigorously, a larger amount of blood is furnished to every organ in the body, and tissues are consequently more liberally supplied with nutriment, and more thoroughly renovated.

Not only is a larger amount of new material carried to the tissues, but the old worn-out waste particles are removed much more thoroughly, being carried to the organs whose business it is to remove them from the body as they are eliminated, or thrown off. Thus the body is kept free from the waste or effect matter which results from the wear and tear of the system,

The lungs, by their increased activity, introduce into the blood and veins of the whole system a larger quantity of oxygen the great purifier, which vivifies the blood, vitalizes the tissues, and cleanses every nook and corner of the vital domain.

Every activity is quickened. The whole system is infused with a higher grade of

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vitality. The bodily machinery runs at a higher speed, and with greater effectiveness for work. The brain, freer from the products of waste, and supplied with more highly vitalized blood is able to do better thinking. The liver having, a larger amount of oxygen and a better blood supply, can do more bile-making. The stomach, having its activities quickened by a larger and richer blood supply, secretes a better quality of gastric juice, and more of it, and hence is able to digest larger quantity of food, and to more perfectly elaborate it and prepare it for entrance into the blood. The demand for larger quantity of food creates a better appetite and a keener relish for food. Thus, every part of the body seems to take on new life and activity; and to a person who has previously been in a state of inaction, with his system torpid and clogged by the products of wastes which have not been properly eliminated, the change is almost equivalent to a new birth. After having once tasted of the delights of living on a higher plane, with all his sensibilities quickened, and his ability for enjoyment and appreciation of the pleasure and blessings of life so greatly increased one could hardly be induced at any price to the old sluggish and inane existence.

THE FLOWER OF FIRE.

अम मणि पद्मा हम,

(By Miss. Mary Winchester Abbott.)

1.

Oh Flower of white-gold Fire,
With red-gold heart,
Like stars and sun
In One,
A Universe thou art.

2.

Thy clinging gold, soft as a
Baby's curled hand,
Thy petals white,
The light,
Of Bharat's ancient land.

3.

Like heart of star, far-shining
On temples old,
Eternal Light,
And Life,
Lie in Thy gold.

4.

Beloved of the gods,
From out thy heart,
On waters still,
At Will
Of Love, Brahm's Fire did dart,

5.

Oh Sun-kissed Flower of Light,
Thy roots in Earth,
Sweetest that blows,
Who knows,
The secret of Thy birth ?

6.

Snow from Himalaya's breast
Veined with Her sky,
Touched with Her Rose—
Gold Dawn
Lit by great Shiva's Eye.

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7.

Jewel that Krishna wore?
Radiant Light,
Flashing the Fire
Of Love,
Into Earth's darkest Night.

8.

Stars from the Mother's brow?
Fallen in Kali-yug,
Fallen in tears and pain,
Fallen in lightning and rain,
Fallen in darkness and death;
Yet in that darkness drear,
Holding the Mother's breath,
Pouring her nectar sweet
Out at Her children's feet.

* * *

Waiting the Word of Power,
Waiting the Mystic Hour.

* * *

Calling Her children now,
Sealed by the Sacred Vow.

9.

Flower of the Sun's own Heart,
In storm and night,
Folding close Thy petals,
Waiting
Guarding the Light.

10.

Lo! at the Call of the Dawning,
Swift Thy petals unfold,
Out of the darkness
Answering,
Flashes the Flame of Thy Gold.

11.

Flower of Fire in the hearts of all,
Leaping high at the Leader's call,
Burning self in the quenchless
Flame,
Burning the lust of greed and name,
Burning the Power of Shameless
Shame,
Fiercer and fiercer the Fire doth
flow,
Purer and purer the Flame doth
glow.

* * *

Now the red hath turned to gold,
"Keep it pure", is thy Mother's
cry,
"Keep it pure and lift it high,
Signal-fire of the world to be,
Flashing its Light o'er land and
sea."

12

Torch of Light for the lands far-
strewn,
With blood-red poppies by hell-fire
sown,
Lurid with flames of hate and greed,
Lust and power and caut and creed.
Steady the glow of its Golden Light,
Flashing far in the world's dark
night.

13.

Purer yet the Flame must grow,
Naught will serve but the white-heat
glow,
Alaya's self, its Holy Flame,
Lift it high in the Mother's name.
Crucible now of Shiv's White Fire,
Self consumed on the Flaming Pyre.

* * * *

Burning, burning, consuming all,
All made pure in the Mother's name.

* * * *

Consuming, consuming—till all is
consumed and
Naught remains but the pure
White Flame.

14.

Flower of the Great White Dawning
Mystic Flower of Fire,
Sun of Gold on the
Mountains,
Waking the World's Great Lyre,

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15.

Flower of the Thousand Petals,
Flower of the Heart of Gold
Mystic crown for
The Mother,
Now as in days of old.

16.

Sprung from the Great Dark Fire
Out of the Luminous Night
Fire of Tejas
Burning,
Into Radiant Light.

17.

Crown Her, Dawn on the Mountains,
Great Mother, ever the same,
Crown Her with Stars
Of Fire,
Crown Her with Petals of Flame.

18

Greatest of Gifts for the Mother,
Flashing once more on Her brow,
White Flame of the Hearts of
Her children
Laid on Her altar now.

19.

White Flame of our hearts, Her children,
Sealed with the Sacred Name
That be our Gift to
The Mother
Crowned with the Great White Flame.

EASTERN AND WESTREN SCIENCE.

(By Miss Mary Winchester Abbott.)

Once in the dim past, before the Great War, there was a time when I heard nothing but science from morning to night. We have probably all had experiences like that, of finding ourselves in a particular circle—religious, political, artistic, scientific. Whatever it may be, it has an unfailing interest, because it is always a delight to talk to people who know their own subject thoroughly; and one absorbs knowledge, like ozone from sea air, without much effort. Everyone was talking Haeckel. He was the scientific idol of the moment; for science I discovered has the idols as well as art or religion. So I read *The Riddle of the Universe*, *The Wonders of Life*, and other "epoch-making" books, and talked Haeckel too. I must admit I found the books most interesting, the remembrance of them being that I thought the *fact* wonderful and disaggreed entirely with the *conclusions*. Indeed, the facts seemed to me to prove exactly the opposite of what Haeckel said they did. In this sense they were illuminating.

Particularly I remember reading about the growth of crystals—in a railway train, crossing the continent. How parallel is the growth to that of organic life, even taking the same forms—as in ice—flowers and trees. And I held my breath as if before a great discovery I glimpsed at once the conclusion that what Haeckel said proved everything—even the highest forms of consciousness—, physical and finite, in reality proved, what instinct had always believed, that everything—even the lowest form of existence, is non-physical and in-finite life and existence was really one universal *life* and if it could not be

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called "spirit" in the ordinary usage of the term, it certainly could not be called "matter," as many of my scientific friends implied.

I had many a battle with them, especially with one youthful fanatic—for science has her fanatics as well as her idols; spiritual natures, whose ideal of truth fights desperately for freedom in the bonds of a material education, often with tragic results. Believing there was "no God, free will, or immortality," this young idealist was yet ready and eager to martyr himself for the Truth. What this ideal of Truth was, for which he was willing to sacrifice everything, if the universe was only one great mechanical process, as he insisted, was a question to which I could never get an answer.

To such eager souls, devotees in spirit, tortured by the cold, hard idol of Western science, what an awakening would be to come into the atmosphere of such a scientist as Dr. Jagadish Chandra Bose and hear the voice of life in his Laboratory Temple of Truth. In the *Prakriti* and *Purusha* of Indian philosophy they might find the solution of many of their doubts, and realise how false is Haeckel's statement that one must choose "either science and experience *or* faith and revelation"; since faith may be a part of science, and experience *is* revelation.

Looking back on those days, and seeing them in the light of the philosophy of the East, I have been struck with this fact; that the great difference between Eastern and Western science, as between Eastern and Western art, is that in the West art and science have no connection with *life*. They are a thing apart, separate. But in the East they are pillars of the one great Living Temple, notes in the one Great Harmony. This is symbolised in the first sentence of Dr. Bose's address at the opening of his institute—perhaps one of the greatest sentences ever spoken: "I dedicate to-day this Institute—not merely a laboratory, but a Temple."

In the midst of this world-war the ful meaning and significance of this dedicatio may be veiled, but we have no hesitatio in saying that posterity will look bac upon it as one of the epoch-making event of civilisation; greater, perhaps, than th war itself, as construction is ever greate than destruction. It is fitting and natur that it should be in India and by an India that the greatest scientific discovery modern times, the oneness of living an "non-living," should be made. A truth disco vered by the ancient Indian Rishis, or sage by other method, as Dr. Bose has himsel said, and now proved through experiments science by one of their spiritual descendant "India," says Dr, Bose, "through he habit of mind is peculiarly fitted to realis the idea of unity." The excessive specialisation of modern science in the West ha led to the danger of losing sight of th fundamental fact that there can be but on truth, one science which includes all bran ches of knowledge." The combination i the Indian mind of the "burning imagin ation," through which all great discoverie are made, with the discipline of "the habi of meditation," confers a particula "power in the pursuit of truth." How great are the fundamental principles o the institute, that it shall be open "witho any limitations to all races and language to both men and women alike, and for al time"; and all discoveries will be mad public property, because the spirit o Indian culture demands that "we shoul ever be free from the desecration of utilis ing knowledge for personal gain." Her in this Temple of Truth, religion an philosophy, science and art meet—symbo again, of the oneness of all life. Wh would be thought of a scientific laborato in the West that began the day wi "devotional exercises"? The "claim art" also, Dr. Bose tells us, 'has not be forgotten, for the artist has been workin with us from foundation to pinnacle," which towers aloft the thunderbolt, t Divine weapon, forged from the sacrifi of a pure and blameless life.

We are wont to say in the West that a age of science is not an age of poetry

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But here in India we have the great poet acclaiming the great scientist in mutual dedication to a common cause. Tagore sings:

"Tis to the Mother's temple ye are come,
Her sacred inner courtyard. * * *
Come with the Mother's blessing, ye whose minds
Unshakable throne on the thunderbolt·
Come all who struggle upward and aspire!
Come, brotherhood of freedom in the soul;
Come ye who know, come ye who work, destroy
Together the long shame of Bharat-land;
Say 'Victory to this peerless man of men,
This kingly sage schooled in austerities.

The greatest Scientist of the world to-day is an Indian. The greatest Poet of the world to-day is an Indian. These two facts, I think, few will deny. What does it not suggest for India of the future?

Those who know Indian poetry know that Tagore is the blossom of a great tradition. Dr. Bose himself says that in founding his Institute he is "attempting to carry out the traditions" of his country which were embodied twenty-five centuries and more ago in such great seats of learning as the Universities of Nalanda and Taxila. A Chinese student at Nalanda records that he was assigned that task of finding the medicinal value, in which they were particularly rich, of all the plants within a certain radius. Could there be a better "inductive method" of "original research"? The great achievements of the East in both art and science, and the indebtedness of the West to them, is only beginning to be realised. Elaborate treatises in almost every department of science are found in the Indian *shastras*, most of them as yet untranslated.

But as in India art is an integral part of the whole of life, so it is with science. As art in the East does not copy nature, but expresses the great creative principles behind the veil of form; so science is not satisfied simply with facts, but seeks ever for the truth beyond. Beyond the analysis it seeks ever the synthesis. It was this synthetic characteristic of mind that led to Dr. Bose's great discovery. Indian thought goes ever from the outward to the inward, from circumference to centre, from the part to the whole, and is therefore never out of touch with life. In the West even philosophy and religion for the most part, seem to have no connection with living. The outward creeds of religion have gone far from the simple inwardness of their founders. The abstract speculations of the so-called great modern philosophers, have they any meaning for the man in the street? Yet the unlettered peasant of India understands the principles of the Vedas enough to apply them in his daily life. Turn from a struggle with some modern philosopher to Plato or the *Upanishads* (from whence much of his philosophy came), how astonishingly simple, as are all the deepest things! One is reminded of Chaitanya's answer to a great pundit—that he could understand the Vedas, but not the pundit's interpretation of them!

It may be said that what we call "applied science" proves that science is in touch with life. But is it? It touches only the surface, the appearance, not the realities of life or such a misuse of it as we see in the West would be impossible. To-day all the resources of science are organised for destruction. Such a degradation of knowledge would be unthinkable to the Indian genius. We are told that gunpowder was known ages ago in India, but its use in battle was forbidden. Did the sages foresee what would be the result of such an exploitation of scientific knowledge?

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There is an Indian fairy tale that once a prince was told by a great sage that he would pass through many troubles, but would always be preserved if he guarded in a safe place three magic gifts—a milk-white leaf, silver-white bee and a golden-hued bee. The milk-white leaf symbolised ethics, the silver bee religion, and the golden bee philosophy. So in India, from the earliest times. these have been the sacred talismans. The difference between India and other countries is that they have been governed by politicians, while the real rulers of India have been the sages, the Holy Men who founded society on religion and philosophy. Was this not true science, "organised knowledge"?

This unifying ideal of religion and philosophy runs through all Inian thought and feeling. Why is Rabindranath's poetry great? Because its essence is religion. Why is Jagadish Chandra's science great? Because its centre is in philosophy. Philosophy and religion are but two different phases of spirituality like Gnana and Bhakti Yoga. All great art is religious, in the larger sense. All great science is philosophical. Art without religion becomes morbid. Science without philosophy becomes damnable. Therefore do we find art inartistic and science unscientific. Neither is in touch with rhythmic principles of all life, which is one.

What is more inartistic than an art gallery, of more unpoetic than a poets' club! Compare the Japanese custom of revealing one art treasure at a time, making the entire room a harmonious setting for this central beauty.

What is more unscientific than to consider one set of experiences true and all other experiences false; or to study one group of facts without any relation to other facts?

In the West, aloofness of art from life gives us conventional decoration without meaning, conventional dress without self-expresrion, conventional buildings with no relation to their surroundings. Cold-blooded stupidity of science gives us the horrors of vivisection, the vulgarity of tubes and buses, the nerve-wrecking noise and tention of motors, steam-engines, and all the paraphernalia of "civilisation." Arts, so-called, and science vie with each other in making life as ugly as possible. And what is it all for, since nothing is good which is not beautiful, and nothing can be beautiful which is not natural—that is, in harmony with the rhythmic laws of nature, which are one?

Why is it that even the guide-books will tell you that "unfortunately the place has lost some of its picturesqueness" with the advent of Western civilisation? The potter sits in the shunshine, chanting his songs to God, creating a thing of beauty, rejoicing in light and colour and the sense of infinite life. But Western civilisation puts him in a factory to polish the points of pins, or to grind out materials to create a demand for unnecessary things, It "raises the standard of living," and is good for trade. That it kills the soul and sets man against his brother-man in an orgy of competition till the world is drenched with blood, does not matter. He is being taught "progress" and civilisation."

Why is it that the more "civilised" a people become, in the Western sense, the less healthy they are physically, mentally and morally? What of insanity and other diseases of "civilization"? It may be wonderfully scientific to be able to walk miles underground, and to go to and from business without ever seeing the light of day. It may be very "progressive" very "civilized," but is it *living*? What is the use of "law and order," of which we hear so much, if it does not give health and joy, harmony and beauty?

In the ancient East every act of daily life was artistic, because it had a meaning, because it was symbol of man's relation to the universal life. Every day began with a realisation of God in Nature and in one's own heart through sunlight and

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water and flowers, meditation and the chanting of *mantrams*. How different the scene in the West! Dark underground passages, jostling, rushing, stolid crowds, and placards making grooves in the brain —"Hurry on! Hurry off! Push! and Pull! These are the *mantrams* of West.

But it will be said, "Think of the alleviation of suffering by science. Look at our institutions, our charit organisations, our hospitals, our homes for the aged and orphans, our free asylums! Yes, look at them! Imagine a visitor from some other planet seeing them for the first time. Would he not say, "Can a people be civilized where such things are required?" Ask an Oriental, if you dare, what he thinks of old people's homes? To the Eastern mind it is unspeakable. Age is reverenced in the East. It is not put in institutions.

Wonderful indeed is the work done for the alleviation of suffering. But let us stop to think, and we shall realise that in a truly civilised community most of the blessings of science would be utterly useless. The noble work of the Red Cross What is it but the "alleviation of suffering" caused by the weapons of science? Look at every department of life. Balance the debt and credit of "science." What do we see? Science has made transport so easy that men no longer walk--one of the greatest sources of health. Science has made factories and other conditions of city life, continually breeding disease of mind, body and soul. Science has made possible business on such a large scale that employers and employees break down under the nervous distress and strain, Science has made war possible on a scale of horrors unknown before the "age of science." Thus at every turn we have science counteracting its own work combating—hopelessly combating—the evil effects of its own misuse, its own misdevelopment. Is there not something wrong? Is such science scientific? Would it not be better to have a Science of *Life*, to prevent the awful suffering that material science fights in vain to conquer? Would it not be better to have a science of the heart as well as of the head, since intellect without heart is the arch-enemy himself, the most ghastly of all things, as this world-war bears witness?

One wonders at the stupidity of man as one reads articles to-day on "self-government" for India, with their platitudinous implications that Western civilisation is the most wonderful in the world. Only occasionally does one hear a different voice, which recognises that "civilisation" has failed because it has "separated the spiritual from the material." One stands in amazement' in face of the spectacle of Europe to-day, at the egotism that still talks of taking civilisation to the East, of "tutoring" India, and the like. Is it like people in a house on the sands, which is falling in ruins about them at the shock of wave after wave that sweeps over their heads, yet calling to their neighbours to leave their house on the rock which is too simple and bare, and to imitate their building—to come and help them rebuild again *upon the sands*.

What nation in the world can be truly said to have had a Science of life? India. Therefore has she lived amid the storms that have wrecked other civilisations. India's social system was founded on co-operation, on the vision of the oneness of life. Shall she leave it for the competitive system of the West? Shall she imitate the scrappy, patchy, because material civilisation that is falling to peices to-day amid the thunder of Karmic law? Or shall she look for light to her own Rishis, who studied the fundamental laws and saw the underlying oneness in all the changing phenomena of life? Not blindly following the old, but creating anew on those eternal principles that made the greatness of her past' and will make the glory of her future, let her hold once more the torch of a true civilisation for the nations of the world. In the Temple of the Mother-nation of us all, the sacred fire

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still burns. May the bleeding, tortured peoples of the West catch its Light, and hear the Voice of Life—the one Life that throbs through all, in stone and plant; in animal and man, in stars and suns and gods. The Voice from the East—the Voice that spake by Galilee the Voice that throbs through all the heart of India :

"Man shall not live by bread alone".

"I am the Immortal and Immutable, the Eternal Substance and the Unfailing Bliss".

THE PSYCHOLOGY OF HINDU-MUSLIM UNITY.

(By Swami Dayanand President Hindu Punah Sanskar Samity).

The Malkhana Rajput reclamation movement has created a stir in some quarters and multifarious shades of opinion prevail as to whether this sudden change of programme will be compatible with the progress of the programme of non-co-operation movement. Many persons professing to be nationalists of the day view with alarm this new movement and think that it will seriously work at the root of the Hindu-Muslim unity which is so indispensable for the accomplishment of Swaraj. As Providence has put in my share some humble service in the Malkhana reclamation movement I have a word or two to say to my nationalist brothers. In my opinion they are aiming at building a fine superstructure without making the foundation strong enough to bear the burden of the building. The word 'Swarajya' is very sweet and soul-inspiring, melting like butter on our ears. But 'Swarajya' without 'Swa' is a terrible misnomer and a codtradiction in terms. How can the Hindus attain 'Swarajya' without attaining the radical principles and traits of Hinduism first of all. The radical principles which make us Hindus, form our distinguishing features as a Hindu Nation, main tain our be-ness or existence in this wide cosmos, constitute our 'Swa' and without the 'Swa' Swarajya has no meaning in the head and heart of the Hindus. How can we be Indians without being Hindus? None can widen his self without having the self first of all. Hinduism can be extended and merged in Indianism but to do this we should create and strengthen Hinduism first of all. To widen a thing without having the thing itself is a glaring impossibility. So there is no logic in the saying that we should be Indians first and Hindus after, and it is simply for this illogical conception that not-withstanding so much vaunt of nationalism and Indianism we see other nations clinging with breathless tenacity to their individual nationality. It is only we the hapless Hindus who are miserable victims of all inconsistent ideas and baseless imaginations. The Mohammadans are Mohammadans first and Indians after, the Christians are Christians first and Indians after. They will not sacrifice Muslimism or Christianism at the altar of Indianism, only we the poor Hindus are exerting to be Indians at the miserable expense of Hinduism. What can be more queer

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than this? We are for every one but not for our own selves. If Swarajya is to be purchased at the price of Hinduism let us embrace the Christian religion and at once we will be enlisted in the category of the ruler's race and all struggle for Swarajya will be gone. God knows when the unfortunate Hindus will emerge out of this terrible hallucination.

The above logic holds good about the idea of 'unity' as well. We should create and strengthen our self before uniting that self with others. If we fail to do this i.e., if we aim at unification before the creation of our national self, it will not be union but it will be 'absorption'. There is great difference between union and absorption. We do not like to be absorbed in the Mohdammaden race and thus annihilate our national existence. We like to preserve and strengthen our national life as Hindus first of all and then join hands with our Mohammaden brethren for the political redemption of India and Indians. Unity between the weak and the strong is an absolute impossibility and a sheer prostitution of the term. The lion befriends with the meek sheep only to devour the latter at an opportune moment. A slave nation is never an object of friendship, it is only the butt of ridicule and an unfortunate agency for the satisfaction of the selfish motive of the ruler's 'race', which always considers it beneath its dignity and royal prerogative to join hands with race of the ruled. Therefore the Christians can not have true unity with us nor the Mohammadens having the flame of free life and strong nationality. Let us therefore be relieved of the delusion that the Mohammadens will combine with and help us in compassing Swarajya. Let us organise our national life with all the efforts at our disposal, let the Dharmic spirit of Hinduism strike all the chords of our being and produce the sweet, soul-inspiring melody of Hindu nationality and then and then only will dawn upon India the auspicious day of real perpetual Hindu-Muslim unity. It is with all these objects in view that this new national movement has been started of which Hindu Punah Sanskar Samiti or Society for reclamation of the benighted Malkanas forms a part and parcel. Such movement will breathe a bracing breath in the national organisation. The present mockery of Hindu-Muslim unity will then be converted into a stern reality and conduce towads the political emancipation of India. In the name of the Lord pervading the spirit of our national life, I therefore appeal to our Hindu brothers representing all creeds or shades of opinion to contribute their best mite towards the success of the reclamation movement hailed in for the national organisation of the great pre-historic race.

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GLIMPSES OF DAYANANDA.

IX.

A VISION OF WORLD-UNITY.

It was on the occasion of the Durbar held by Lord Lytton at Delhi, that Dayananda convened at his camp a conference of the exponents of the various religions working in his time for the uplift of India. The great Muslim leader, Sir Sayad Ahmed Khan, to whose prophetic insight into the spirit of the age, modern Islam owes its achievements in progressive liberalism in the India of to-day, was there to represent Mohammedanism. Baboo Keshava Chandra Sen, the apostle of Brahmoism, with a few other distinguished lights of his Samaj, Munshi Kanahya Lall Alakhdhari, whose writings had a wonderful influence in liberalising orthodox Hinduism in the Punjab, Munshi Indra Mani, who had taken to himself the gigantic task of defending Hinduism against attacks of non-Hindus, and such other religious propagandists, who dissatisfied with the state of religion at the time, were, each according to his lights, preaching rationalism, and dealing, each according to his might, a death-blow to superstition and whim, assembled in response to the invitation of the great Seer. Dayananda was conscious of the immense revolutionary currents that were covertly sweeping over the uneasy bosom of the seemingly tranquil land. The mutiny of 1857 was not yet an event of the dead past. It had failed of its purpose but had left its legacy of unrest. None dared talk of political emancipation: that topic was taboo. The apparent clemency exercised by the rulers had only emphasised the helplessness of the ruled. The spirit of freedom, however, had, instead of dying out, widened its range. The whole human outlook was now within the scope of that spirit. The soul of India was liberating itself, first in the field of religion. The community of ideals that characterised the mission of almost all religious reformers of the time, working each in his community, and yet helping indirectly the regeneration of the whole country, forms a very interesting study for the historian of to-day. Dayananda percieved that Sayad Ahmed Khan and Alakhdhari were proceeding just on parallel lines. He desired that the forces of the two should coalesce and by a combination of their divided strengths, accelerate conjointly the progress of their common motherland. The vision was grand, the vision of a united India, purged of its religious prejudices and sectarian partialities, the Mohammedan joining hands with the Hindu to work under the common banner of Humanity for the realisation of a common human end, viz, liberty and oneness. Religious solace, Dayananda knew, was a prime hankering of the human heart. To banish religion from the life of man was an empty dream, a futile hope. To hush up the voice of the soul for the achievement of its dearest comfort was an attempt that must defeat its own purpose. Many another leader that has succeeded Dyananda, has to his infinite enlightenment, and perhaps edification, found that the concern which the human masses evince for religion is no insignificant factor in their lives, not a factor that may be grappled with only by ignoring it. For a time curbed, the hankering has burst into passion and disturbed the political atmosphere with a suddenness and violence quite unforeseen and unprovided against, Dayananda wanted to strike at the root of human animosity. Religion, he knew, was the lever that lent to all human enthusiasm its momentum. He meant to unify humanity at that fundamental point, the point of religion. Of open

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controversies in public, he had engaged in many. The masses had been literally electrified by the successes he had won in public debate. Of the art of religious polemics he was a past master As a means of proselitization of masses, the method had succeeded wonderfully. Such debates, however, could be won even by tricks. In public it was the art that triumphed, not necessarily the truth of the triumphant disputant. Of the spiritual superiority of one faith over another the common folk were the last to be efficient judges. The masses always danced to the tune their leaders set to them. Now therefore Dayananda was addressing the leaders—the leaders of thought. The appeal with which he opens his *Magnum Opus*, the Satyartha Prakasha, was repeated to these men of light and leading. The Veda appeared to Dayananda to be the perfect truth. It was the primeval revelation of Divine Wisdom. From it were derived all true faiths and formulae of religion that were swaying the minds of people in all countries. The commandments of the Veda had been adapted by Prophets and 'Princes of Peace' to suit the necessities of their own times and climes. The sages of India had compiled their *Smritis*, the apostles of Christianity their Bible, the Prophet of Arabia his Koran, and so on and so forth. If the followers of all religions were to own their common homage to that common primeval Fount of Wisdom Divine, and consented to make an adaptation of their temporay codes so as to make them fit in with the changed conditions of the now changed times and climes, a real foundation of human unity might be laid, and all quarrels of creed hushed for all time. The religion-rid Twentieth Century might only then be spared the ghastly spectacle of a world-wide Armageddon, whose succees consisted in part at least, in bringing to a successfull close the Christian Crusades begun so far back as the 11th Century. Dayananda wanted to found world-peace on the basis of Religious Unity. To that end he made his proposal to the religious leaders of his country. They listened to him but were not prepared for an answer. The Rishi was talking in advance of the religious temper of his age.

A few years later the same proposal was made to him from another quarter. The founders of the Theosophical Society addressed to him from America a letter full of reverence and love. They accepted him as their Guru, and expressed their willingness to unite their Society with the Arya Samaj. He, they said, was to be the Upadeshaka, i.e., the Preceptor, of both the societies. Prompted by devotion, characteristic of new disciples, they made a long voyage to India, and without waiting for his return went to have the Darshana of the Guru in the midst of his tours. The connection between the associations could not, however, be long maintained. Under the tension of difference of creeds it soon snapped. Always ready to welcome into his armsall those who joined his church, Dayananda never lost a moment in disowning, too, one who would not sincerely follow his creed. Burning with the passionate desire to see the world once more united in bonds of one-ness, he could never be party to a unity founded on Untruth.

The very failure of Dayananda to realise his dream of World-Unity seems to us to be the evidence of the extreme loftiness of his prophetic vision. The Seer was looking beyond his times. The arms he stretched out to far-off America to hug to his bosom his once blood-relations, the Aryans of old times, now alas ! divided from him by borders of creed and colour, borders more impregnable than borders of configurations of water and earth, are yet visible to the eye of imagination as the brilliant arms of the rainbow enclosing in one embrace both east and west, and striving to give to the whole human race a common banner, a common insignia, a common creed, a common church.

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X.
TOWARDS OTHER CHURCHES.

The attitude of Dayananda towards Non-Aryan faiths has been considered wrongly, to be sure—to be hostile. His mission has been considered to have been to extirpate all systems, except his own, which latter he wanted to build on the ashes of the former. In more places than one, he makes his position on this point clear. Truth, he was of opinion, could only be one. In religious verities he perceived mathematical exactness. Religion, no doubt, deals with infinite entities. But so does higher mathematics, too. His quarrel was not with the number of churches; they might be multiplied to any figure. As long as they were the various applications of the simple universal principles underly. ing all religions, applications designed to meet the exigencies of time and clime, he was ready to support them. His denunciations, and in these he never minced matters, were directed against superstition and practical barbarities, in vogue in the name of religion. For men of every inclination his heart was burning with love. He wanted to set all on the right path. All faiths prevalent in his day were, he thought, aberrations from the Veda. His mission was to restore them to their original purity and perfection. What of truth was in them was of the Veda, and hence quite as dear to him as that primeval scripture, which he regarded as the sole repository of truth undistorted, wisdom undefiled.

How else could be explained the tolerant and peaceful affection shown invariably to him by those whom the world would regard as his adversaries. Mohammedan fanaticism was in his time at its highest. No Arya Samaj had by that time, by its incessant propaganda, toned down the opposition of its opponents. The Mullahs and Padres saw, for the first time, their, what they regarded, sacrosanct, faith denounced freely and without a hitch. Christians and Moslems have, after Dayananda, created trouble a great many times. Who prevented them from doing so in his very face? Was Dayananda milder in his refutations than his followers were after him? Not a bit. His attacks are in their point keener, in their vehemence bolder. Only, the spirit that prompted them was the spirit of love. He never attacked with a view to lay bare the weakness of his opponents. Victory was never his ideal.

We have already in a previous section referred to the triangular controversy held at Chandpur. The statements of all the three parties have been preserved, One point that strikes the reader is the total absence in them of acerbity. The Moulvi, the Padre, and the Swami, speak out, all their minds freely. The theories of the opponents are examined and discussed by them thread-bare, but personalities, as also the dignity of the faiths they profess, are left scrupulously untouched.

Sir Sayad Ahmed Khan was among the devoted admirers of the Swami. He never lost an opportunity of seeing him daily, whenever his presence in the same town or city made such visits possible. Similar, too, was the practise of Reverend Scott, priest in charge of the church of Bareilly. So deeply impressed was the Swami with the reverence that Scott showed to him that he gave him the affectionate title, "Bhakta Scott." Once after the lecture of the Swami was over, it was found that Bhakta Scott had not come to attend it. It was Sunday, and the Bhakta, they said, might be conducting the service in his church. The Swami wended his steps to the church of Bhakta Scott. The latter, as soon as the news was carried to him of the Seer's coming, came out to receive him and requested him to deliver *his* sermon that day. Man-worship was the subject that the Swami chose for his sermon. The audience stood spell-bound, and the reverend father himself had nothing but admiration for the remarks of the sage. The moral of the incident is obvious.

A similar happening is reported to have taken place during his stay at Lahore.

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He had been invited to the place by Brahmo Samajists who had hoped to make him the preacher of *their* principles. Where there were points of difference between their faith and his, they thought they would be able to convert him by their superior reasoning. Two lectures did the sage deliver from the pulpit of the Brahmo Samaj. The first was on the infallibility of the Veda, while in the second he established the doctrine of transmigration. Now these two were the points on which he was non-Brahmo. Finding themselves unable to question his reasonings in public, the Brahmo stopped his preaching from their platform. The Sanatanists were never prepared to admit him into their temples. A Mohammedan physician, Rahim Khan, was at last found ready to lend him his bungalow forboth his residence and lectures, His hospitality the Swami requited, strangely, by making refutation of Islam, the subject of his first discourse at his house. Some body objected that the Swami's conduct on the occasion was marked by gross ingratitude. Was it so? asked the Swami of the doctor. The latter smiled saying that the objection was not his. The Swami forthwith began:—Cruelty could not daunt him, nor could hospitality allure him. A bungalow was a very low price with which to buy away his truth. His life had been passed in the open, where the azure sky was his pavilion, bare earth his floor and bedding. He could revert to those former haunts of his and summon his audiences there. The men of the world were kind in asking him to their houses. He, too, was grateful for the offer, which he meant to repay in his own, his most valuable, coin. He had no money, no wealth, no earthly belongings. He had bargained away his whole life for a glimpse of unalloyed truth—no unprofitable bargain to be sure. That same glimpse was he going to share with the doctor. Was he ungrateful? The whole audience shook their heads. They were all deeply moved.

Such, gentle reader, was the spirit that underlay the thundering denunciations of Swami Dayananda, which spared neither friend nor foe, and for which every evil, whether of India or of outside, was an evil and every good, whether foreign or native, was good. He was free, undaunted, unalloyed, loving only truth, condemning only falsehood. In this he never made a compromise. Yet at the bottom of his condemnation there lay flowing unceasingly a stream of love and compassion, love for all those that live, compassion for those of them that were misguided.

'DEVOTION.'

CONTEMPORARY THOUGHT REVIEWED.

MEDICAL MYTHS.

FROM JENNER TO SPAHLINGER.

Helen Veale B. A., (Lond.) contributes an interesting article to *New India*, exposing the superstition that lies at the root of so many medical practises of the West. One of them is vaccination. In India law makes it compulsory for parents to subject their children to this operation though some of them have conscientious scruples against this cruel and inhumanitarian remedy. In the matter of medical treatment absolute freedom should be allowed to every individual. The latter values his life more than does the government under which he lives. The compulsion becomes downright tyranny when the government is not of the same religious faith as the subject. When again it is proved that

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the treatment so objectionably upheld is simply a medical 'hoax' we do not know how to characterise the part that a government plays in bolstering it up. Says the writer :—

It has long been recognised by the few who have the courage to think independently and weigh evidence, that the practice of vaccination against small-pox is a superstition , resting on very imperfect scientific theory and upheld, as a rule, by the medical profession merely because in their professional training it has become an article of faith, as unquestioned as the South Sea Islander's fetish. Unfotunately, the East too has fallen under the spell of this particular superstition, backed as it is by all the prestige of Government patronage ; but those who have still an open mind on the subject, or seek to vindicate other methods of fighting disease, may find help from a clever article on Jenner contributed to *The Nation and The Antheneum* for February 3, by Bernard Shaw, a very independent thinker and exposer of fallacies.

In this article, he points out that, at the time of Jenner's invention, inoculation was the favoured preventive, a practice introduced from Turkey in the 18th century, by which the disease germs of small pox were introduced into a healthy system, in order that nature's power should develop, within the system, whatever was needed to counteract those germs, and so fortify against future attacks, when the resisting power of the body might be weaker. Shaw does not deny a certain amount of common sense in this theory, while pointing out that it is now condemned entirely by medical science, and its use made illegal by Government. But it is noteworthy that all which has since been claimed for vaccination was once claimed for inoculation, and perhaps as Shaw thinks, with rather more justification. But a farmer, named Jesty, happened on the discovery that inoculation with the germs of cow-pox seemed to insure against the more virulent disease and the theory was developed by Jenner, who had, according to Shaw, "an active, curious, shallow mind,... ...To call him a man of science now-a-days, would be like calling Old Moore an astrologer." Jenner "caught on" to farmer Jesty's discovery, made some experiments and hastened to publish his infallible remedy, for which Parliament voted him two sums of money, amounting to 30,000 pounds. Unfortunately Jenner himself soon found he had been too hasty and came to the conclusion that the protective germs came from horse-pox rather than from cow-pox but already the idea had been too far organised to allow easily of modification and its author's misgivings were stifled in the enthusiasm of his professional supporters, who finding themselves in the enviable position of being indispensable to the Nation for a very simble operation for which they were monopolists naturally were not unwilling to believe in the hypothesis on which these advantages rested.

But in spite of every oncouragement by Government and enlightened opinion, the "vaccination stunt" has discredited itself more and more. In 1871, when compulsion was at its height, the greatest epidemic on record, scourged the English Nation, and another followed in 1881, vaccinated people proving no more immune than others. Of course, the orthodox hastened to claim that the vaccinated took the disease in a less dangerous form, and that the unvaccinated more often succumbed to it, but statistics have proved very refractory to the apologists, and seem rather to support the argument of their opposers, that not vaccination, but improved public and private sanitation, have been the causes of fewer epidemics in England, as the figures for typhus and cholera shrank at the same time and in far quicker measure than small-pox though no such treatment had yet been adopted for those diseases. Moreover, the public was losing faith, and beginning to evade the compulsion law with more determination, as mothers compared

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notes, and realised how many babies had fallen victims to the practice of vaccination, though, of course, the death was certified by some other name. To quote Shaw: "To inoculate the patient without carefully measuring his resistance is to risk murdering him; and in the nineteenth century, there was no known method of measuring his resistance. Children were vaccinated and adults revaccinated indiscriminately. The consequence was that shocking cases were always happening. In spite of the determination of the doctors and the authorities to ascribe a death from vaccination to anything else from which the victim could by any sophistry be said to have suffered, a baby was admittedly killed every week by vaccination.

Still more shocking was the admission of a doctor in a public trial that the effects of vaccination are indistinguishable from those of syphiles. "This may have excused the doctor," says Bernard Shaw, "but it was a knock-down blow to vaccination". Quite so, especially in view of the fact the latest accredited theory of modern diseases is that they nearly all arise from a syphilitic condition, though it is only in the case of the poor that the doctors are bluntly outspoken, whereas the ugly word is camouflaged in decent society.

Bernard Shaw describes the stages of the victory won by anti-vaccinationists against legal compulsion, and concludes that the "vaccination stunt" is now dead, but we are not so sure. Are conscientious objectors allowed immunity here in India? In one case, at least, the brave Theosophist of Sindh, Mr. Pethmal Parsram, fought the local authorities successfully, and it would be interesting to hear from him just how he did it—we think it was by invoking the aid of an English Socialist, and getting awkward questions asked in the Mother of Parliaments. Anyhow, he succeeded, and his children are unvaccinated and healthy.

In the concluding article, published on February 10 Bernard Shaw goes on to show how Jenner's success started Medical Science along an evil path of empiricism, and is astonishing to the layman to read that Pasteur was no Doctor of Medicine, but a chemist and physicist. As an observer of microbes, he too hit on an ingenious idea which seemed to give promising experimental results, while Lister, about the same time invented anti-septic surgery. "These three men loaded their successors with a heavy burden of error and malpractice, which was eagerly adopted by the General Medical Council (a body almost perfect as an example of everything that is pernicious in trade Unionism).

Bernard Shaw's indictment is the more striking in that he does not entirely oppose the principle of inoculation, but leads on to a consideration of the work now being carried on by Dr. Almroth Wright, against "indiscriminate" inoculation, with any kind of serum or vaccine. Wright's theory if that there must first be blood tests, to see if the resisting power of the patient is "on the tide or on the ebb," and he claims that statistics gathered in the Great War finally expose the futility of indiscriminate inoculation. Many of us would rather see a complete face about, and the final abandoning of what can at best be only a negative method of healing, in favour of methods more positively akin to the new spirit, like that of Dr. Abram's in California, or any use of radio-activity, electricity or sunlight, to stimulate or reinforce the natural powers of the human system. But it seems we have still to run the gamut of many a fresh error, and not only at a cost of human suffering, but demanding countless animal victims, from whose torture no real benefit can ever accrue to men. It is dismal reading for the humanitarian that a Swiss gentleman named Spahlinger—[illegible] significantly, no doctor

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of medicine, but of law—has discovered a serum for tuberculosis. Read how this serum is produced, and you will rub your eyes, and ask if you are living in the twentieth century. He has invented a machine which shakes up, at different speeds, tubes containing the tuberculous bacilli, causing these to release twenty varieties of toxins, which then are injected into twenty high-bred horses. When these have had time to develop in their blood the necessary antidote, they are bled, and the combined serum obtained from the twenty antidotes is said to be an efficient cure. This is worthy only of Gulliver's "Academy of Projections". Yet the *Times of India* remarks that "Spahlinger is a genius whose work will rank with that of Koch and Louis Pasteur". Certainly, but perhaps that is less high praise than it sounds. We also read "All the stock of serum has been exhausted in demonstrating its efficacy, and years must elapse before it can be produced on any scale. We have heard it prophesied that the horse would soon be extinct. Is this the way in which his passing is to be hastened by the human brother he has so nobly served?

INDIAN SHIP-BUILDING INDUSTRY, AND MERCANTILE MARINE.

The above is the caption of an article by Doongersee Dharamsee appearing in the current issue of Welfare. The writer makes quotations from foreign writers to prove that ship-building was a flourishing indusry on the Indian shores down to the time of the British advent in India. Writes W. Digby :—

"A hundred years ago, ship-building was in so excellent a condition in India that ships could be (and were) built, which sailed to the Thames in company with British-built ships and under the convoy of British frigates, The Governor General in 1800 (Lord Wellesley) reporting to his master in Leadenhall Street, London said, The port of Calcutta contains about 10,000 tons of shipping, built in India, of a description calculated for the conveyance of cargoes to England." (Prosperous British India, PP. 85-86.

And further :—

"From the quantity of private tonnage now at command in the port of Calcutta, from the state of perfection which the art of ship-building has already attained in Bengal (promising a still more rapid progress, and supported by abundant and increasing supplies of wood) it is certain that this port will be always able to furnish tonnage to whatever extent may be required, for conveying to the fort of London, the trade of the private British Merchants of Bengal,"

Continues the writer of the article :—

There is ample evidence left by English writers of the 18th century that the teak-wood vessels constructed at Bombay and Calcutta were greatly superior to the oaken ships of England in construction and durability. Lt. Col. A. Walker, in his "Consideration on the Affairs of India," written in the year 1811, says ;—

"Many ships Bombay-built, after running 14 or 15 years, have been brought into the Navy and were considered as strong as ever. The Sir Edward Hughes performed I believe, eight voyages as an Indiaman before she was purchased for the Navy. No Europe built Indianman is capable of going more than six voyages with safety."

He further adds—

"It is certain that our present policy prevents us availing ourselves of all the advantages which our Indian possessions are capable of producing."

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As to the cheapness of Indian vessels he says :—

"Ships built at Bombay also are executed by one fourth cheaper than in the Docks of England. In Bengal, in Prince of Wales Island and other maritim- stations excellent ships may be construc- ted."

The writer has familiarised himself with the condition of shipping and ship-building concerns that are work- ing against heavy odds in India even to-day. He enumerates the following handicaps on the progress of the concerns:—

(1) Hostile, strong and methodical competition from the well-established foreign concerns.

(2) Government apathy and sometimes hindrance from Government officers.

(3) The inexperience of directors and officers of the companies.

(4) Want of moral support of legisla- tive enactments.

(5) Protective tarifis of other Govern- ments,

He substantiates his statement by the following account of the disaster that the Indian Companies met when they began to push themselves up a little.

The Bengal Steam Navigation Company, The Swadeshi Steam Navigation Company, The Indian Steam Navigation Company, The Anglo-Indian Steam Navigation Co., Ltd., and many other companies were floated. The directorate was composed of some merchants and lawyers with no or little direct experience of matters regarding shipping. The steamers purchased by them in Europe and America consisted in many cases of second hand second class steamers. In some cases directors became victims of unprincipled people at foreign markets, and steamers in not a good condition were sold to them, which required very substantial amounts of money for repairs and alterations. The officers of the companies in many cases were quite inexperienced. They had no knowledge of the world's freight markets, tariffs, canditions of the trade and cheap supply of the stores necessary for a steamer. There was no hope from the Government. No subsidy, as could be expected in other countries, no share in the rich pie of government mail and coal contracts can be had by local Indian companies. No European merchants would show any encouragement to them. Each and every Indian merchant was sympathetic. But they were under the influence of foreign companies with whom they had been connected for a long period. The merchants got many facilities from a foreign company which was not possible from newly formed Indian companies. (1) The marine insurance charged by the underwriters for Indian steamers was very heavy, (2) The Indian company could not arrange with outside foreign companies to take goods to any port of the world, or to arrange international carriage and connection. (3) Lacs of rupees belonging to Indian merchants were lying with foreign companies as deferred rebate, liable to forfeiture in case of disloyalty, *i. e.*, patronage of new or undesirable companies.

Still many merchants under disguised names shipped large amounts of goods by the Indian steamers. But a regular freight war commenced. The freights to all the Indian ports, where Indian Steamers visited, were cut down far below the expenses incurred by the steamers. The passenger rates were even brought down to a good extent. The writer remembers an instance in which competition was so keen that free passengers were taken to the ports of the Coromondal coasts. Not only that, but a present of a silk handkerchief was made to every passenger in addition

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to a free passage. The goods freight to Bombay from Rangoon once stood so low as Rs. 5 to 6 per ton, which to Calcutta was brought down to Rs 3 per ton. The sseamers worked at a loss. It was nothing to an old established company with great income from other sources and with a substantial reserve funds. But this freight war was responsible generally in driving the Indian companies to an early liquidation.

The following as regards the Anti-Indian policy pursued by the E. I. Company in the Eighteenth Century to kill Indian maritime spirit may form interesting reading:—

Our flourishing Ship-building industry of the Eighteenth Century was destroyed by the British Ship-owners who had brought to bear great influence on the Directors of the East India Company, who in sympathy with their brother merchants took steps to remove the yards at Bombay and Calcutta and build their ships in England. An embargo was placed on the Indian Ship-building industry in the shape of an advice to the company's servants in India prohibiting the further employment of Indian ships in the trade between England and India. Mr. Taylor in his History of India (p. 216) says:—

The arrival in the port of London of Indian produce in Indian built ships created a sensation amongst the monopolists, which could not have been exceeded if a hostile fleet had appeared in the Thames. The ship-builders of the port of London took the lead in raising the cry of alarm. They declared that their business was on the point of ruin, that the families of all the ship-wrights in England were certain to be reduced to starvation."

Their agitation impressed the Directors, who advanced curious and unsubstantial arguments in their despatches. They were much against the employment of Lascars in British ships. Here are some samples of their arguments. The court said in their despatch dated 27th January, 1801,

"That they (ships) will be usually manned in great part with Lascars or Indian sailors, men of that race are not by physical frame and construction fitted for the navigation of cold and boisterous latitudes."

(Of course! The inhabitants of colder climate were 'fitted' specially to maraude in the tropics!)

Later, they speak more openly.

"Indeed the return of peace might call for the substitution of British seamen many of whom must have to seek employment in the merchant service, and no British heart would wish that any of the brave men, who had merited so much of their country, should be without bread whilst natives of the east brought ships belonging to our own subjects into our ports."

As for remedies the writer suggests the following:—

(1) A Marine Boy Scout (Sea Scouts) movement to be introduced at big ports. And regular encouragement to be given to it.

(2) A company to be floated with half capital supplied by the Government and half capital subscribed by the public. Small yards should be established in various big ports for building launches and small coasting steamers. Port trust and Government requirements to be ordered from the Company. When better times come, these yards to be developed into big yadrs for building large ocean-going steamers.

(3) Schools to be established in big ports for teaching Marine Engineering and Navigation, the successful candidates getting coastal certificates which could be

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changed to ocean certificates by sending the youths to England by awarding them scholarships.

(4) Government should arrange to send some youths to England. The big ship-builders who are patronized and given contracts by the Government should be approached to take them as apprentices in their yards to learn ship-building.

(5) The Steamer Companies who receive mail and coal contracts from the Government of India should be compelled to engage officers educated in Indian Training Schools. Only companies who accept this clause in their contracts should be patronized by the Government of India.

(6) Some provision should be made with the steamer companies to open night schools in big steamers to educate the Lascars.

(7) Port Commissioners in big ports should open schools for the children of the Lascars for teaching navigation and imparting ordinary education.

(8) Adequate representation of Indians in the Port Trust. The present composition of that body makes it only look through the English companies angle of vision.

(9) Free trade is not suitable for India. Protection is required for her industries. Steamers of Japanese, French, Dutch and German lines are getting every facility in Indians waters, whilst the same is denied to us in foreign waters. All the foreign steamer companies are heavily subsidised by their respective governments, and every information possible is placed at their disposal by their governments. The Indian government should see that the people of India are given proper value for their raw goods. It is remarkable that a large proportion of the export and import trade of this country is in the hands of foreign merchants, and the assistance and help received by them from their governments is mainly responsible for the prosperity of their business. Steamship companies of different countries look after the interests of their merchants.

TOWN-PLANNING IN ANCIENT INDIA.

From another paper appearing in the same journal we cull the following to show how particular ancient Indians were in observing hygienic rules. Life led by them was corporately civic, and what conduced to the good of the community was strictly enforced on the individuals.

Outside the house and touching is there should be paved a foot-path (*vithika*) (like the two paved foot-paths on both sides of the main thoroughfares of a modern city) which should be as wide as one-third of the breadth of the house. This foot-walk formed an indispensable part of the house.

All the houses should face the royal roads and at their backs there should be *vithis* or narrow lanes to allow passage for removal of refuse matters and night soil.

"Between any two houses, or between the extended portions of any two houses, the intervening space shall be four *padas* or three *padas* (feet). This reservation of an intervening space between any two houses of the same owner or to neighbouring tenements of different house-holders, is conducive to sanitation.

THE 'WORDLY' FOLLOWERS OF BUDDHA.

Bhuddhism is generally believed to, have been a religion only of monks. Renunciation is thought to have been the keynote of the faith of Buddha. His own enlightenment proceeding from his disaffection from home, it is thought that for house-holders

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there was no room in his system. Of women, too, he made *bhikshunis* How, one naturally asks, could such a faith prosper and be at one time embraced by the common folk. In *the Eastern Bhuddhist*, issued from Kyoto, Japan, there appears an artical, wherein the following statements, gathered from the sacred books of the Buddhists, are given as a refutation of the above belief:—

We read thus: "There are not only one or two or three or even up to five hundred Upasakas, but many, many more yet. They are householders married and with children, they enjoy the five pleasures, they decorate themselves with perfumery and flowers, they keep and feed maids and servents. But they have in accordance with this Law cut off the three entanglements and we are weak in avarice, anger, and infatuation; they have attained the Sakridagamin (Coming Once) and after being reborn once in heavens and once on earth, will end this life of suffering."

And again: "There are not only one or two or three or even up to five hundred Upasikas, but there are many, many more yet. They are householders, they keep and feed men and women, they are used to the enjoyments of the five pleasures, they decorate themselves with perfumery and flowers. But they have in accordance with theis Law put an end to the three entanglements, have attained the Srotapanna, will not fall into the evil ways as they are definity walking to-ward the Supreme Knowledge (*bodhi*).. ."

The Upasika is a woman lay-disciple of the Buddha and the Upasaka is a man lay-disciple, and the Buddha according to these passages from the Agamas did not make any distinction between the two classes of his followers, as both are assured of their spiritual attainment. What is mort remarkable in the connection is thar all these householders with theie wordly enjoyments and aspirations arg not excluded from Buddhism as lone as they live in accordauce with the Dharma. To follow a commentator, "the five pleasures" which these lay-disciples are said to enjoy are those orginating from the five senses which are colour, sound, odour, taste and touch, According to another commentator, these pleasures are those arising from property, sex, eating and drinking, reputation, and sleep. Whichever way we may understand tho "five pleasures," they eviddntly belong to what we generally dysignate a wordly life.

There was once a man of the Shakya faimily by the name of Hundred-Handed. He voilated the fifth precept concerning liquor, but when he died, the Buddha assured his attaining the Srotapanna and being kept away from the evil paths. As Mahanama asked the Buddha how this was possible, the Buddha explained for him and his brethren that there are seven kinds of his disciples who are kept away from the evil paths. Then concluded the Buddha:—"O Mahanama, when Hundred-Handed of the Shakya family died, he kept his holy precepts inviolate abandoning the taking of liquor. Therefore, I say he had attained to the Srotapanna." In spite of this man's non-observance of the fifth precept sometime in his life he was a devout Buddhist, he believed in the Buddha as the teacher of the Holy Doctrine, he believed in the Dharma, and finally he believed in the Sangha as the congregation of the followers of the Holy doctrine; and his belief was pure and simple. On this account, the Buddha saw in him the certainty of not falling into evil ways. (Seee the Samyukta-Agama, XXXIV.) This tolerant attitude of the Buddha towards such occasionally inattentive stragglers as long as their inner faith in the Three Treasures was absolute, conclusively proves that faith was all important and that thought.

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lessness was not necessarily the course of retrogression or loss of faith.

Says the same writer:—

When we consider Buddhism in its first stage of development, we must not forget the group of those "worldly" householder-disciples of the Buddha, who came to him with just as much devotion and reverence as the monks and nuns who constituted the main body of the Brotherhood. In all likelihood, the number of these lay—followers must have exceeded that of the homeless ones. While we have no authentic records to support our supposition in the Buddhist literature in our possession at present, it is not at all irraitional to make this statement that as the Buddha extended the fields of itineration and as the Brotherhood grew larger and more influential, there must have grown around the Buddha and the Sangha quite a larger congregation of "worldly" devotees, who accepting the Refuge Formula, also looked after the material side of the monk's life. As the great spiritual leader, the Buddha's moral influence must have reached far beyond his immediate circles, he did not make it the absolute condition of enlightenment or Nirvana to abandon the home and worldly life, he put the principal strength of his teaching in accepting the Refuge Formula as the expression of faith in the Three Treasures. This was the one thing that was needed. The life of saintliness as practised by the monks and nuns was praiseworthy enough, but if the Buddha's religion did not embrace those who stood outside this holy group, it could never stir up such a powerful general spiritual revolution as it actually did even in the earlier stages of Buddhism. The greatness of the Buddha lied in fact in the universal applicability of his teaching.

And further:—

To take an example from the Dighagama, XVII, we have the case of king Ajatasatru.

Confessed the King: "And now I betake myself, Lord, to the Blessd One as my refuge, to the Truth, and to the Order. May the Blessed One accept me as a disciple, as one who, from this day forth, as long as life endures, has taken his refuge in them. Sin has overcome me, Lord, weak and foolish and wrong that I am, in that, for the sake of sovereignty, I put to death my father, that righteous man, that righteous king! May the Blessed One accept it of me, Lord, that do acknowledge it has a sin, to the end that in future I may restrain myself."

"Verily, O king," said the Buddha, "it was sin that overcame you in acting thus. But in as much as you look upon it as sin, and confess according to what is right, we accept your confession as to that. For that, O king, is a custom in the discipline of the noble ones, that whosoever looks upon his fault, and rightly confesses it, shall attain to self-restraint in future."

This instance points to the large-heartedness of Buddha who knew what sort of stuff men of the world were made of. He overlooked their weaknesses and to make their progress in morality easy accepted them with their limitations and encouraged them to a new life, a life of internal reform.

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THE WORLD OF BOOKS.

भारतवर्ष का इतिहास

By Lala Lajpat Rai. Published by Rajpal at the Arya Pustakalaya, Lahore. Price Rs. 2-12-0.

This is a schoolbook written for the use of students in national schools. It covers the Hindu period of Indian History, and has been written from the national point of view. More sources have been laid under contribution than are generally tapped by authors of similar text books. The writer is the well-known Punjabi patriot whose love of his country has stood many tests, winning him in the eventide of his life a second incarceration. Even a casual reader going through the pages of his history cannot but be impressed by the lofty sentiments of pride in India's past, and an irresistible hope of its as bright future. That Hindus have been a great race is writ large on every page and in every line of the volume. There are, however, certain pet theories of western writers, of which even the liberal mind of Lala Lajpat Rai has not been able to purge itself. He starts with the assumption that the Aryas came into India from the North-West and that their original home was in Central Asia. This he takes as a self-evident truth. Lala Lajpat Rai could at least have mentioned the rival theories that historians have put forward as regards the original abode of the Aryans. That Aryans came from outside is nowhere so much as hinted at in Aryan literature. Of writers that regard the Aryan invasion as a myth Pottinger instead of embracing the faith of, is the latest. It is a wonder that Lala Lajpat Rai could not keep his mind open to these various suggestions on that much-disputed topic. Even if his personal leanings were on the side of the invasionists he could at least have discussed the subject. In other things, too, he has followed the conclusions of the western writers, caring little to study the Indian orthodox point of view. The latter, no doubt, has not been pressed on the attention of scholars with sufficient force, but an author with the resources of Lala Lajpat Rai could, inspite of the lack of popular literature, have consulted Indian Pandits, and read their views in the scanty works they have published. His chronology is western. Ignorant of Sanskrit, he could depend only on translations, which, where the text is a Veda or a book written in Vedic, are a special obstacle in the way of an easy understanding of truth. What commends the book is its treatment of the subject from the national view-point. Even under the leading strings of Westerns, Lala Lajpat Rai's study of Hindus is sympathetic. Into his readers he infuses some of his own sympathy and pride.

The Reign of Law. By Jinaraja Das. Published by the Theosophical Publishing House, Adyar, Madras. Price As. 12.

This book is a collection of essays on Buddhism, touching only those phases of that faith which even a non-Buddhist should have no hesitation in accepting. Great stress is laid on living the life of,

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Buddha. Buddha was a man, a perfect type of of man, such as every man, if he endeavours properly, can, and in due course must, become. A Buddhist alas ! believes more, and perhaps less, than this. Nor do the teachings of the Master confine themselves to the shallow depths sounded in this exposition. For the popular mind the exposition is good, but the scholar should have something deeper.

ब्रह्मचर्य का विघ्न और ग्राहकों का कर्तव्य

By P. Shripad Damodar Satawlekar, Swadhayaya Mandal, Aundh, Distt. Satara. Price As. 2.

The author denounces, in this booklet, the publication in papers of advertisements calculated to demoralise the readers. Physicians and quacks, in order to popularise their medicines, write much that makes the people think lightly of venerial diseases, so that sin progresses and the sense of morality becomes less and less keen. It should be the common aim of humanity and religion to put a stop to the publication of such advertisements. They are a bar in the way of *brahmacharya.*

Sketches of Great Truth. By Wayfarer. Published by the Theosophical Publishing House, Adyar, Madras. Price Rs. 1.4.0.

A number of articles conbributed originally to the supplement of the New India have been reprinted in this book in book form. There are, in all, fifteen papers, written to present Theosophy in an easy intelligible form. To the ideas common to all religions Theosophy adds very little that is new. There is one doctrine, viz. that of incarnation which theosophists, both in and out of season, emphasise. That, too, they contend has been the common belief of all the religions at one time or other. Christianity rejected it in the fourth century. In Islam, also, Moulana Rumi has given unequivocal expression to his belief in it. The book on the whole forms delightful reading.

BOOKS RECEIVED.

The Punjab Court Act (as amended by the Punjab Act IX of 1922) By S. Haranam Singh M.A.,P.C.S. Price ; paper cover Rs 1/8., Bound Rs 2/-.

Report of the First Anglo-Catholic Priests convention. Published by the Society of S.S. Peter and Paul, 32 George Street, Hanover Square' London, W. MCMMXXI.

आर्यगीतांजलि

By Shri Harishchandra Deva Verma 'Chatak.' Published by Shri Vishva Nath Saraf, Hindi Swadhin Pustakmala, Ranchi. Price As. 6.

This is a collection of poems on a variety of subjects by 'Chatak.' The keynote of the collection is nationality. Some of the poems are full of spirit and meaning. From a cursory perusal of the book it is evident that the writer is a good poet in the making. Continued practice may one day make the seed in him flower into abundant fruit. The metres employed in the collection are both *matric* **मात्रिक** and **वर्णात्मक** *Varnatmak.* Where the latter are employed, the writer has not been able to give the construction of

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his lines, a good, compact finish. His sentences are in some places loose. For instance न अब हा कुछ मान हरे रहा would sound better and be more compact if it were written:—

कुछ नहीं अब मान हरे रहा;

and न कुछ भी अवशेष रहा यहां ॥

would loose its looseness if it were written:—

कुछ नहीं अवशिष्ट रहा यहां

Words like व्यथा and दुःख have, without rhyme or reason, been corrupted into विथा and दुक्ख. Chatak ji will do well to guard against these errors in the second edition.

Art O'Sahitya (Art and Literature). A discourse on art in Bengali literature, By Kshitindranath Tagore.

The book discusses the ideals of art generally, and such as are found in Bengali literaure, particularly. It criticises some of the tendencies in the works of Bankim Chandra Chatterjee and Rabindra Nath Tagore, and finds that they sometimes concentrate their attention simply on the exposition of Beauty. The author advises authors in Bengal to give up the deliniation of illicit love, copied from the West, and to express through their art higher, truer and more national sentiments. He thinks that above all God must be the centre of art, that Good must be its aim, that nature must be its basis, and that naturalness must be its soul.

The opinions of the author have our hearty approval, and we think the ideals of art in Indian literatures should be as he says.

EDITORIAL REFLECTIONS.

VAGARIES OF THE CENSUS OFFICERS.

We depend for our figures about the population of a country on Census Reports that are compiled with so much labour and expense. Their main purpose as *The Indian Social Reformer* remarks in a recent issue is to supply to the Government and the public statistics that may help them in devising means for promoting the sanitation etc. of the country. In India Census serves other purposes too. All depends on the compilers of the figures. We are personally aware of what mischief ordinary recorders and enumerators in the streets make by simply mis-stating the religion and language of a section of the people. The Arya Samajists have suffered special losses on account of the prejudice of the Census Office minions. Their religion and language have often been mis-stated. For accidental mistakes such as a huge undertaking like the enumeration of the people of a large country and the tabulation of mi-

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minute details about their living and religious inclinations etc., must necessarily involve, every sensible person will be ready to make allowance. When, however, officers as high-placed as a Census Superintendent indulge in vagaries when tabulating results, their conduct becomes highly reprehensible. In the following words does Mr. H. J. Sedgwick, the Census Superintendent of the current Bombay Census, refer to a manipulation of figures by Mr. Gait, a former Census Commissioner :—

"In 1911 Mr. Gait, the Census Commissioner, when visiting this presidency on tour, converted 70,000 Bhils in Reva Kantha from Hindus to Animists by a stroke of the pen."

Mr. Sedgwick is satisfied that the Bhils are a part of the Hindu community. When according even to Mr. Gait's standard they pass into Hinduism, no change is observed either in their mode of living or their status in the system of caste. The Hindus are a very large community and in it innumerable forms of faith and religious customs are to be observed. What other community is free from these differences? Animism, as it is described for the purposes of Census, may be found in all religions. It is difficult to distinguish it from idolatory and nature-worship. Highest poetic flights are sometimes elevated forms of animism. When, therefore, Mr. Sedgwick writes on the authority of a Sanskrit Scholar that the Atharva Veda is but "a mass of animistic magic" he forgets that the vulgar will always convert your sublimest poetic fancies into grossest animism. The fault, in such a case, is not of the Atharva Veda but of the perverted intellect of the pseudo-scholars.

THE GRAVE (?) OF THE ARYA SAMAJ.

Agra, somebody told us, will be the grave of the Arya Samaj. It was at Agra that the Arya Samajists were purifying Malkanas by sprinkling over them the water of the Ganges, thus recognising and sanctioning practically the purifying potency of that water, which Dayanand, and after him, his followers, had incessantly denounced in such scathing terms. It was at Agra that in his over-solicitousness to bridge up differences in the Hindu camp, the Arya Samajist had consented to wear a *mula*, and if rumour reported true, bowed before idols. It was at Agra, that instead of prohibiting, the Arya Samajist was actually engaged in promoting, the pernicious habit of smoking, by arranging inter-smoking parties, this last being the final step in the process of removing untouchability between two sections of Hindus.

Such was the pinching, heart-harrowing tirade that the gentleman, to whom we have referred without naming him, showered on us and on the Samaj we represented. And we had to bow.

Making ample allowance for exaggeration in the list of charges of hypocrisy and irreligious sycophancy levelled against our brethren working at Agra, we must admit we have been guilty of lapses. Hitherto, the Arya Samaj was the 'Admittance Door' of the Hindu community. While on all other doors—and they were big gates—was marked in bold letters 'Exit,' the

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Arya Samaj presented the single, and perchance singular, spectacle of 'Open Arms' on behalf of the whole Hindu Society. Those reclaimed or prosleytised became Sanatanists or Arya Samajists according as their individual religious persuasions directed. The conscience of the Arya Samaj, however, was clear, in as much as the rite it performed was Arya Samajic and the sermon it gave to the neophite was Arya Samajic, too. The great merit of the Arya Samajist was that he shunned compromise. He would never change his 'Namaste' for 'Ram Ram'. His was an unbending, an unyielding, an obdurate faith. Agra, however, has changed all that.

We have till now supported the work of reclamation going on at Agra. We have devoted pages to shield it against the charges of non-Hindus. We still stick to the same opinion. Brothers have been reconciled with brothers. What more blessed than this? Untouchability, no matter by whom it is entailed and on whom, is a curse. Man, because he is man, is pure, anything but untouchable. We bless the Arya Samaj for the share it has taken in blotting out that curse. By its peculiar position which makes it socially a part of the Hindu fabric, it could cement sections of Hindu *biradari*, a thing which perhaps it would not be able to do, if a similar gulf separated two sections of Mohammedans or Christians.

What we object to is the procedure adopted. The part of the purification ritual, that is repugnant to the accepted principles of the Arya Samaj, should be positively refuted and condemned, not at all countenanced, by Arya Samaj propagandists.

While saying this, we do not mean that the Arya Samaj should withdraw its forces from the field of Shuddhi now that so much has been accomplished mainly, if not solely, by its aid. Let it push on the advantage, till now gained. Only let it not sacrifice its avowed principles. For, principles, not numbers, are the mainstay of a Church. Arya Samajists, wherever they go and in whatever field they work, are first and last Arya Samajists. Their sympathies are human, for if they be true to their creed, they will do best service to humanity by practising and professing their humanitarian faith. While pressing the campaign of *Shuddhi*, let them assert, not at all conceal or forego, their Arya Samajic character. We realise the difficulties, or perhaps even dangers, that such an attitude may perchance involve. The main issue before the community and the country is no doubt that of removal of untouchability. That is a human mission, a nationalist mission, a religious and communal mission. The Arya Samaj should not by its presence make matters at Agra complicated. The removal of untouchability cannot brook the delay of a day. The Hindu conscience is aroused on this point and Sanatan Dharamists have, we understand, organised their own Shuddhi campaign under the auspices of a separate 'Samiti'. It is well and good. The work properly belongs to the Sanatanists. And in case the Arya Samajist, pure and simple, *i. e.*, the Arya Samajists with Namaste on his lips, the denouncer alike of idolatory and of smoking, and of the superstitious whim that the water of the Ganges has soul-purifying virtues, in case such an Arya Samajist should

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prove a bore to the reclamationist, let him withdraw and bide his chance.

We stand for principles, not for ties of kith and kin. The Arya Samaj is a spiritual society, not a brotherhood of blood relations. If the Hindus prove, in the work of Shuddhi, our worthy disciples, let us give them our unstinted benedictions as large-hearted Gurus. We have sown the seed. Let others reap the harvest. Our actions, too, will not, under an equitable providence, go without their reward. Let only our intentions be pure and our motives purely religious, purely spiritual.

THE ROOT-CAUSE(?)OF PUNJAB DISTURBANCES.

Our Moslem contemporaries of the Punjab have, with singular pugnacity, been dubbing Pandit Malviya 'the *Bani Mabani*', that is the root-cause of the Punjab disturbances. And why? He had on the occasion of his last visit to this province the, to them unpleasant, audacity to say a few bitter truths as regards the tragical events at Multan. He diluted his account with many extenuating statements and took ample care not to offend the arrogant pride of even the atrocious section of Moslems. He suggested the formation of Citizen Guards into which he would draft Indian youngmen of every community and of every religious bent. He said, peace-loving citizens should combine, irrespective of their faith and birth, to make such disturbances impossible in future. An innocent proposal, and withal how highly patriotic and useful! His findings as regards the events at Multan differed not a whit from those of Hakim Ajmal Khan who had investigated the facts with him. And yet he came in for a unique share of anathema at the hands of his people. The disturbances have since been repeated at more places than one. The Pandit has taken the earliest opportunity he could of coming to this province again, and seeing for himself, and if possible, trying to becalm, the uneasy situation. Scurrilous posters pouring abuse on his devoted head welcomed his arrival at Amritsar. He, however, displayed wonderful patience. He had not a word of complaint on his lips. He addressed crowded meetings at Amritsar and Lahore and repeated his counsel for the establishment of Citizen Guards and Citizens' Associations which would give Indians of all shades of religious faith and communal bias, an opportunity of meeting on a common platform and evolving citizens' consciousness of their patriotic and civic duties. The tone of the Pandit was unnecessarily apologetic. He meant to please his Mohammedan compatriots at all costs. Instead of fixing the blame for the disturbances on either community or a section of it, though, as he knew the facts, he could easily apportion the blame, he made tentative statements prefixed with 'if' and condemned the culprits whoever they might be. In the alternative sentences in which the condemnation was couched, the Hindus came in first for the denunciation. He more than once emphasised that it was never his desire or even dream that the Hindus might become strong at the cost of Mohammedans or that their strength might be a source of danger to their compatriots. He went the length of cursing those Hindus, or in the alter-

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native case, Mohammedans who would purge India of the other community. The tone of the lecture was apologetic and the wording was that of an appeal rather than that of an advice. Is it on account of this his over-humility that Pandit Malviya is seized upon by our Mohammedan brethren as an easy prey. The uniform policy of our Moslem contemporaries is to cry down, and if possible by that means, cow down, Hindu leaders by trumpeting at the top of their voices that they are prejudiced. They will carry on the cry inspite of your protestations to the contrary, till they will bring the leaders on heir knees. Their own leaders they stifle, in case these venture to address them in a manner that is opposed to their wishes. Moslem leaders, instead of leading, are virtually led by, their masses, while Hindus in order to keep themselves popular, take their cue from the wishes of Mohammedans. It is thus that the Hindu community stands whining, flattering, pleading, at the doors of its neighbours. We wish our leaders could cultivate greater independence and instead of sticking to their fame as all-India patriots, could, at least some of them, content themselves with the popularity they gain within their own community. Thus would their community gain strength enough to influence the trend of events in their country. Thus would *Swarajya* on account of the stamina that the numerically dominant section of the Indian populace would attain, be pushed towards its realisation. Weakening Hindus to propitiate Mohammedans is at least as suicidal, if not more so, as strenthening Hindus at the expenses of Mohammedans

KAR SEVA AT AMRITSAR.

It is reserved for Sikhs in the present age to evidence what magnetism religion exercises over the minds of its followers. While non-violent passive resistance is yet a dream of non-co-operators, and politicians are wavering in their belief as to the possibility of using effectively this instrument of wresting constitutional reforms, the Akalis in the Guru Ka Bagh gave a practical demonstration of absolute non-violence in the face of a most cruel form of provocation and repression. They won the battle by dint of their bloodless bravery, and the proudest government had to stoop low at their feet. The latter had not the gracefulness to own defeat but the way the matters were managed stands out as a master-peice of shame-faced arrogance. Every little success, he has won, has encouraged the Sikh to greater and greater vetures so that his self-confidence has to-day reached its highest point. At a happy moment the idea occurred to the Shiromani Gurudwara Prabandhak Committee to issue a proclamation that voluntary service of Sikhs was required for clearing the tank of the Durbar Sahib of the saffron, as they called the mud, that had collected at its bottom. The work could have been done by hired labourers. It may, in that case, have cost less and spared the followers of the Panth the inconvenience and trouble they underwent in leaving their homes and making a very long journey to Amritsar. We learnt at Bannu that no less than eight hundred persons left that small town for the sacred purpose. The railway fare alone should have cost each

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pilgrim some fifteen rupees, which if contributed as subscription could have hired the services of a labourer for a fortnight, a period that very few pilgrims could stay at Amritsar. The loss of income that the pilgrims bore by absenting themselves from their stations of work is additional. Add to it, too, their personal inconvenience, and that may give you an idea of what amount of suffering and toil the S. G. P. C. imposed on the followers of the Panth. Religion, however, never measures devotion in terms of money and amount of labour put forth. Of mathematics it is singularly ignorant. It has its own standard by which it evaluates the merit of voluntary labour, labour of love, that it exacts and receives. By the spirit alone that attends such labour it guages its high and low merit. Of ranks and status it levels all differences. H. H. the Maharaja of Patiala stood with the meanest of his subjects with the pan of mud on his plumed head. With his gorgeous robes besmeared with the sacred mud he walked out of the tank and then started away to the railway station. The sight was highly elevating. The *Panth* has thus established the fact that in the hearts of high and low in the Guru's Church there throbs the same eagerness, the same enthusiasm, the same devotion to serve the cause of the Guru and his *panth*. Its wonderful organisation under which the ruler of a realm makes equal haste with the meanest menial to obey the behest of the administrative body of the *pantha* is undoubtedly a miracle in this cold, calculating age. Not the mud that will be cleared but the bond of unity it will forge will be the guerdon of the *Kar-Seva* that the Sikh world is in its devotion putting forth.

Behind the devotion, however, there lurks stark ignorance and superstition. Pilgrims are said to have taken, for distribution among their relatives, handfuls of sacred mud, which the latter, somebody told us, use in painting on their foreheads and other parts of their body. If the reporter is to be depended on, it is even eaten. We have every regard for the sentiments of our Sikh brethren, and so far as the movements engineered by them deserve praise, our tribute to them has ever been unstinted. It should however, be the common cause of religions to root out superstition. The achievement will be worthy of Sikh enthusiasm, if along with the devotion they inculcate, the Sikh leaders were to impress on their followers the physically right character of the things they deal with.

The devotion displayed by the Maharaja of Patiala, was, it has been suggested, a political manœuvre. If so, it loses its spiritual merit. The strength of the Panth, however, suffers not the least diminution on that account. Even if for political purposes *a raja* has stooped before it, it has proved its powerful influence and its compact organisation. Only, let not its own aims become political.

THE PRESENT SITUATION

The Indian National Congress is fast losing its prestige. The All India Congress Committee by passing a resolution at Bombay which is virtually a suspension of the Gya Congress resolution has stultified itself and yet has failed to win the goodwill of Deshbandhu Das. Even

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assuming that the Congress Executive can, when an emergency arises, suspend the operation of a resolution of the parent body, it can scarcely be denied that emergent powers must be used most sparingly.

The situation has not changed a bit since the Congress met at Gya. It is absurd to quote the Bardoli precedent. The grim shadows of Chauri Chaura dominated Bardoli. Has anything approaching the Chauri Chaura tragedy happened in the country since the Gya session of the Congress? Moreover the Bardoli resolution suspended aggressive activities because of the fear of outbreaks of lawlessness on the part of an undisciplined mobs who had failed to absorb the spirit of non-violence. Was there any danger of violence being offered to the Swarajya Party, if the Anti-Council entry campaign had been carried on by the Congress? Who scented the danger and when? What happened after Gaya to justify these apprehensions? It is needless to pursue the argument further. It is clear as noon-day that the Bombay resolution is not an exercise of emergent power which unwritten cmstitutional law vests in all supreme executives of representative assemblies. It was open flouting of the Congress. The A. I C. C. had the hardihood to accept a compromise which the Congress had explicitly rejected. The Bombay resolution is, therefore, not only *ultra vires* but is an outrageous defiance of an explicit mandate of the Congress. It is, therefore, clearly the duty of all loyal congressmen and loyal subordinate congress organisations to uphold the dignity and authority of the invalid and unlawful decision of the A. I. C. C. In this note we have dwelt merely upon the constitutional aspect of the question. Our views on the merits of the case have been too fully stated several times to require re-iteration.

MR. DAS AND MAHATMA GHANDHI.

The most deplorable feature of the situation is that Mr. Das has not been conciliated by this practical proof of the lengths to which the majority can go in deferring to his judgment in view of his past distinguished services to the nation. He has entirely misunderstood the action of the majority and mis-estimated his hold upon the people. He evidently thinks that the majority has been humiliated into abject surrender and this sense of so-called triumph has further emboldened him. In a speech at Madras he actually said—although he had the good grace to withdraw the remarks unreservedly afterwards—that in 1921 Mahatma Ji had bungled and mismanaged the whole affair in relation to the negotiations with the Viceroy. This unfortunately, though inevitably, led to the publication of all the telegrams that passed between the leaders on that occasion. We stand astounded at this stupendous and Himalayan blazing indiscretion of Deshbandhu. What code of discipline or laws of *espirit de corps* would justify a colonel to disclose the negotiations between the general and the enemy especially after the general had become a prisoner of war. Supremely confident self-consciousness and dominant self-complaisance on the

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have in history, often landed nations in disaster.

Deshbandhu is getting dangerously self-laudatory and the first personal pronoun is being too lavishly used by him. Let him beware of the insidious approaches of a habit of mind which has undermined the leadership and usefulness of mightier personalities than Mr. Das.

AGE OF THE EARTH.

Of all the religions on this earth the Vedic religion alone teaches that the age of man upon earth is 2000 million years.

The Atharva Veda gives the exact figure. There was a time when Usser's chronology held the day and the researches of occidentals into the antiquity of oriental religion and philosophy were vitiated because the Jewish scripture had enslaved the minds of scholars. The tables have now been turned. Biblical conceptions of cosmogony stand discredited. Professor Eddington showed in a recent address at the Geological Society that it has taken more than 10,000 million years since the duration of the day was between three and four hours and the moon was born. What wonder, then, that the earth became habitable 2000 million years ago.

THE GREAT SHANKARA AND IDOL-WORSHIP.

It is a curious phenomenon in Indian religious history that while all the medieval *Acharyas* have preached against idol-worship, their followers have raised temples to them and set up their idols for worship. The great Shankar's idol is worshipped at many places and his adherents are among the most zealous Sanatanists and idol-worshippers. And yet he was no idol-worshipper. His attitude towards image-worship is thus described by Mr. Banikanta Kakuti in a learned article on, "*Life and Teachings of Sankara Deva*" in the current issue of the *Indian Review* :—

A story is preserved about Sankar's setting up the idol of Jagannath during the early period of his teachership. It was a mere decoy to the hostile Brahmins. They had been long causing nuisances to his followers by forcibly taking off their sacred garlands and putting them round the necks of dogs. Sankar set up an image of Jagannath and invited the Brahmins to carry on the worship. The Brahmins declined the invitation. Sankar declared that heavy fees and substanial rewards would be given. The Brahmins came and worshipped the idol. The ceremony over, Sankar started a debate on the merits of idol-worship. The Brahmins who upheld idolatry were defeated. It was finally settled that "stones, earth and waters, even these might acquire the potency to purify the hearts of men after a course of prolonged association. But a Bhakta purifies people by his very appearance. The Bhakta stands higher as a purifying agent than idols or sacred waters." So that the devotees whom his opponents made no scruples to molest were higher than the idols they worshipped. This story is often twisted from its proper bearing to prove that Sankar supported idol-worship. As a matter of fact no image is ever worshipped in any Satra of Sankar.

Madhava Dev has the following to show the futility of idol-worship:—

"Unmanifested is the Supreme Deity, how could you worship him?

How could you dismiss him after worship who is all-pervasive?

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How could you meditate on him who is so formless as this?

So purge your mind by reciting the name of Rama."

In another place occurs this,—

"To seek spiritual purgation in sacred waters, to believe divinity dwelling in idols, these ideas are never entertained by Vaishnavas. He who harbours these is worse than a cow, says Krishna."

But the construction of the mental image of the Lord of the heart for purposes of concentration is soundly advised:—

"Contemplate the image of Rama, in your heart and recite his name in your mouth."

Comment upon this is superfluous.

THE MUSIC CURE AND MODERN CIVILIZATION.

Our countrymen have long been familiar with the music cure. The Atharva Veda explicitly mentions it. It appears that other ancient people like the American Indians also, knew its utility. Writing on the subject in *Hygeia* (Chicago) Miss Deunare expresses her surprise at the fact that civilized society has a way of discovering facts that the Indians have known for centuries. We quote from her article in extenso :—

"We are more emotional than the Indians ; at least we express our emotions more freely, and hence we conclude that the beneficial effects of music are due to the association of emotional ideas. Thus it is argued that a majority of instances of mental derangement arise from thwarted affections, and that the love-song is found to be beneficial in treating such disorders. The afflicted person may have heard the song under happy conditions, and it arouses pleasant memories ; hence the benefit. It requires little experiment to find that 'Jazz' is unduly stimulating, and that a lullaby is soothing ; but neither the arousing of associations through a love song nor the use of these simple forms of rhythm should be termed scientific, or the results considered conclusive evidence of the value of the method.

"The Indian medicine-man treats physical as well as mental or nervous disorders with the aid of music, but there is no appeal to the emotions in his method. Instead, it appears to be based on the actual power of ryhthm. For about fifteen years I have been associating with the old medicine-men of several tribes, in connection with my study of the music of the Indians for the Bureau of American Ethnology of the Smithsonian Institution at Washington.

"Some of the medicine-men of the various tribes administer herbs and say that they sing in order to make the herb effective. Others sing without using material remedies. I have recorded phonographically more than one hundred songs used by Indian medicine-men and women when treating the sick, with description of their methods of treatment. Sometimes a medicine-man uses affirmation as part of his method. Thus a Chippewa medicine song contains the words, 'You will recover, you will walk again. It is I who say it. My power is great.' This was sung for a person unable to walk. A Yuma medicine-man said, 'After singing my fourth song, I always ask the patient if he feels better. The sick man has always said that he felt better."

"The Sioux medicine-men have songs for various ailments—a song to be sung when adjusting a fractured bone, a song for headache, and a song for diseasas of children, The Papago of Arizona have special songs for every imaginable ailment and like the Northern Indians they believe that healing songs are given them by certain birds and animals. There is nothing in the words of these to arouse

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many associations in the mind of the patient. When the medicine-man is not praising his power or that of the guardian animal or affirming the recovery of his patient, he uses words that are poetic. The song is usually sung four times then follows a pause, after which the song is again sung four times.

"Beating a drum or shaking a rattle as part of the bedside treatment of the Indian medicine-man. In some instances this is done without singing, and is so emphatic as to stimulate the patient to action if any life remains. Drum and rattle have a steady, throbbing rhythm which holds the attention of a sick person and undoubtedly has some effect, but it is the song that is considered the important part of the treatment.

The rhythm of one Chipewa medicine song is as positive and energetic as that of 'Onward Christian Soldiers.' No one can hear it without feeling its force and vitality. The words are in praise of the doctor's mystic power, 'in a dream I was told to do this.' The rhythm of other songs are more subtle. The Indians are masters of rhythm. We hear of their war-like proclivities and their trivial customs more often than we hear of their occultism, in which rhythm forms an important factor.

"It would be interesting to test the Indian medicine songs in the treatment of the white race by music, not within too narrow limits, as in the song for reducing a fracture, but in the larger outlines of the soothing and stimulating melodies, apart from any association of ideas. A few old men remain who know the old songs of the days when the healing art was closely allied to religion. Perhaps these old men, with their ascetic lives and tremendous powers of concentration, could teach the white race a lesson in the curative power of rhythm."

So after all the white attitude of omniscient conceit is being modified by the invincible logic of facts. And what about the Theory of Eternal Progression ?

REVAMPING THE BIBLE.

The Bible has outlived its usefulness. The intellectual and moral bankruptcy of the Christian church is too self-evident to require any demonstration. And yet precisely because superstitions die hard, some people must needs plough the sands and try to bolster up the collapsing walls of *Jericho*. The Tyson Lectureships Foundation organised under the laws of the State of New York has conceived of a plan to make accessible to men and women in general the results of the research of modern scholars into the origins of the Christian religion and its interpretation and particularly in regard to the Bible". The idea and intention of the movement is thus set forth in an official statement ;—

"The conception of the Bible as a single inerrant volume equally inspired by the spirit of God and altogether consistent and harmonious with every other portion, is an unfortunate inheritance from medieval Europe.....

If this much is admitted, all claims are surrendered. How inveterate is a habit of mind. It clutches at names long after the substance has vanished into nothingness. Tremendous are civilizeed man's powers of self-deception!

THE HYPOTHESIS OF INDEPENDENT DEVELOPMENT.

The Evolutionary Hypothesis is losing one by one the pillars on which it formerly rested. The evolutionists explained the common origin and development of knowledge among various

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branches of mankind on the hypothesis of "Uniformity of the institution of the human mind," although they failed to trace this uniformity in the light of the doctrine of survival of the fittest. Dr. W. H. Rivers F. R. S. was prevented by death from delivering the Presidential address to the Psychology section of the British Association. The address, however, was delivered by Dr. C. S. Myers and has been reproduced in the *Psyche*.

The *Occult Review* in a summary of the papers tells us that its chief concern is to indicate how and why the once general belief of evolutionists that "after an original dispersal.....the different varieties of mankind had developed their cultures independently" by the now more prevalent view that they were the result of transmission. If the hypothesis of trasmission is once accepted, the doctrine of evolution will have to be given up, for it would be absurd to hold then that a single race evolved knowledge and transmitted it to other races. If then, the origin of knowledge is not to be sought in evolution, it must needs be looked for in an eternal body of knowledge existing in the Divine mind and revealed and re-revealed through cycles of creation. And what record of ancientmost and yet perennially fresh wisdom has a better claim to the title of primeval and eternal revelation than the Veda which directly inspired all the magnificent philosophy of ancient India and indirectly originated the thought of the entire world.

CO-OPERATION AMONG NATURAL SPECIES

The brutal doctrine implied in the phrase "Survival of the Fittest" has been the undoing of modernmost races. It has led to ruthless competition, to exploitation of the weak and unscrupulous pursuit of selfish gain to the detriment of the backward and the result is that the civilised world is an armed camp and each civilised country is the playground of contending interests of warring organisations each standing for one set of claims and pledged to the extirpation of antagonistic claims. It is a healthy sign of times that the motto "Let the Weaker go to Wall" is being replaced by the maxim "*Brotherhood is a fact in Nature.*" It is being recognised now that selfish competition leads not to advantage but to destruction This Mr. H. Reinheiar conclusively proves in an article in The Hibbert Journal for October 1922. Says the writer :—

"We are obliged to assume the evolution of life to have depended much more widely than we were hitherto aware upon the character of organisms as workers and (organic) citizens. Evolution depended upon good behavior.

"Faculties of adaptation and of resistance to changing circumstances are of the very essence of individuality and of life But something is wanted over and above these faculties in order to achieve progress, namely, that the organism do its duties to others in the web of life. It is those incapable of learning a useful industry that are gradually eliminated much in the same way as wastrels, or hopelessly backward races, are eliminated in the course of human civilization."

'Survival of the Fittest', we are told, now means survival of those that do their duty. We quote his very words.

There is a system of elaborate service of one organism to another; and, this system is practically universal, though of extraordinary variety and diverse de-

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ees of intimacy. From this it should ot be too long a step to the further ecognition that there exists a definite stem of organic sociality in which the ood of the whole takes precedence of the ood of the individual or of the species and ording to which, 'status' is achieved by idely availing services, *i. e.* genuine erit."

"Merely expedient adaptation to which arwinists assign chief importance, is cious and inevitably destined to failure."

"We have allowed ourselves to be eceived by the transitory and apparent uccess of depredation, just as nations ave long been deceived and led by glitering successes to place their trust in ilitarism."

Ruthlessness is a suicidal policy n nature. Here is an illustration:—

"It has long been known that if a lant, for instance, abandons the path of onest labour and lapses into parasitism, will lose the vital chlorophyll apparatus, without which it cannot liberate xygen. But if the plant ceases to upply oxygen and other organic substances to the animal, the latter will in ts turn cease to be able to support he plant as it used to be able to do; nd thus further vital endowments have o be surrendered. Invariably, when an rganism can be seen to have lapsed nto inferior socio-physiological habits, t will be found to have been thereby egraded and rendered physiologically eaker, susceptible to infection, and liable o loss of survival-capacity."

The organism which becomes selfish nd disregardful of the welfare of the thers and does not give service or service thereby suffers atrophy f some of its essential powers.

"Misuse is base unredemptive use *i. e.* asteful and retrogressive concentration f powers upon bad ends and it is stigmatized accordingly by lopsided and ntithetic developments and penalized by arious forms of nemesis. The wages of biological sin are: deformity, inferiority, disease, degeneration, death. This truth is written large in almost every page of natural history so that he who runs may read. Yet it is denied, since the schools are committed to the erroneous view, which is the corollary of the natural selection theory, that wild nature being 'naturally selected,' could not harbor disease."

PURBLIND CONCEIT.

The talk of democracy and equality in the British Empire is a big hoax and delusion. We shall give a few specimens of the unabashed and shameless balderdash in which some Imperialists indulge which will fill our readers with nauseating disgust. A sorry specimen of British humanity, an apotheosis of the borgeosie spirit, an incarnation of jingo conceit, an embodiment of wretched and perverted superciliousness, a personification of bloated race-hatred and colour-prejudice, who signs himself A. Davis, delivers himself of a number of farragos of absurdity with which his junketting swollen head is stuffed, in the hospitable columns of the *United Empire*. Says he:—

Any open-minded student of British colonial growth cannot fail to realize that in a land where the British or European colonist becomes rooted to the soil and permanently resides with his wife and family, there he is fated and will ever strive to become paramount. Kenya has this permanent European settlement now established in the Highlands and increasingly at the Coast. The European population has doubled itself within the last five or six years. It is not the case of a mere settler or squatter, but numerous families with children growing to adults and Kenya-born second generation already appearing.

The whole aspect has changed since the traditional past—the past of Sir Harry

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Johnston or Mr. Wallis and other early explorers and old officials, who visualize the land as they knew it in the early days. These times of 20 or 30 years ago are past and forgotten by all men except the historian, of the old-fashioned official. To-day despite its large coloured population, the European settler and established trading firms are paramount in activity, in actual presence and in political power. This position cannot and dare not be tignored.

Can the bloated British junketter justify the claim in regard to Japan? Why is the British Colonist not supreme in the Transvaal? Why does not the British settler become paramount there? When the Indians become strongly organised for self-defence in Kenya, then striving for paramountcy will cease. The writer goes on to say:—

Regards from an ethnological standpoint, is it wise to bring Asia to Africa before even the great problem of the native African has definitely shaped itself? Is it fair to the African to cumber his industrial advancement by opening the flood-gates of Asia into the skilled labour market? And taken from the standpoint of British colonisation, which is moulding the African in Western ways, is it good statesmanship deliberately to encourage Asiatic control and Eastern religion and thought into the millions of tribesmen inhabiting the Great Lakes regions? For Kenya is the focus and centre of real dominion over Central East Africa.

As regards the blessings of European control over Asiatic races, the Congo people had an over-dose of it and the Negroes of America are experiencing it in the form of lynching. Hypocrisy and selfishness are never so disgusting as when they put on the thin veneer and mask of righteous expediency and solicitude for the victims of exploitation, oppression and of operation of blood-sucking. Well has Edward Carpenter said:—

The brotherhood of nations and of men comes on apace.
No dreams of youth bestir.
The ancient heart of the earth fair dreams of love and equal freedom for all folk and races.
The day is past for idle talk of Empire.

THE CONSCIOUS SUBJECT.

It is, indeed, noteworthy that there is, in these days, a strong reaction against the dominant materialism of half a century back. The leading psychologists of modern times cannot now proceed further in their metaphysical researches without postulating the ego, the real powerful self. Says professor Ward in his *Principles of Psychology*:—

"Psychology is not called upon to transcend the relation of subject to object or, as we may call it, the fact of presentation. On the other hand, as has been said, the attempt to ignore one term of the relation is hopeless and equally hopeless, even futile, is the attempt by means of phrases such as consciousness, or the unity of consciousness, to dispense with the recognition of a conscious subject."

Reihl says:—

"Every possible explanation of consciousness must evidently presuppose consciousness itself."

Coleridge says:—

"Consciousness is groundless because it is the ground of all other activity."

Maurice Maeterlink, the great Belgian Philosopher, says in his latest work "The Great Secret":—

"While there is reason to fear that the first memory, that of which our brain

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makes use, is impaired or extinguished at the moment of death, just as it is impaired or diminished by the least ill-health during life, is it not, on the other hand, more probable that the other more capacious memory, which no shock, no sickness can confuse, will resist the terrific shock of death; and is there not a very good chance that we shall find it intact beyond the grave.

Apparently the West is awakening from its stupor. The ashes of the Dead Sea fruit deceive it no longer. It is now turning to the bread of life.

VEDIC CREMATION IN ANCIENT AMERICA.

Historical and archaeological researches are every day bringing forward confirmatory evidence in support of the proposition that Vedic civilization and culture at one time dominated the entire world. Mr. William C. Mills contributes an informing article to the *American Anthropologist* on "*Exploration of the mound city Pors country Ohio.* "He distinctly comes to the conclusion that:—

It is evident that this basement, a sacred place, was used for a long period, but that its purpose was mainly that of cremation. The cremated remains were apparently then removed to adjacent sacred places for deposit and burial. In the end, the site was abandoned, the excavation filled to a level with the corresponding natural surface, and upon this restored surface Mound No. 7 was constructed.

It further seems that the dead were buried in a permanent receptacle made of masonary which very much resembled the Havana Kund, Says the learned writer:—

The evidence, then, as to Mound No. 8 and its central deposit, as interpreted by this survey, is as follows: After cremation elsewhere, probably in the adjacent mound, No. 9, the human remains were brought to Mound No. 8, and, together with their accompanying artifacts of copper and other objects, were deposited within the basin formerly serving as a crematory. In close proximity to this basin its contents, were then deposited

And again:—

As to the first of these suggestions, it will be noted by reference to the photograph of the basin, that the present survey found, at the south west corner of the "altar," and entirely outside of it, a distinct receptacle or depository, not mentioned by Squier and Davis. This depository was in the form of an upright mold, rounded horizontally, and extending vertically from the floor of the mound to a height of 20 inches. The diameter of this mold at the bottom was 18 inches, with a gradual lessening towards its top. In a word, this mold was exactly that which would result from a filled bag being set upright on the floor and covered over.

THE DECADENCE OF CHRISTIANITY.

The following from *The Unity* of America speaks for itself:—

We saw a newspaper interview the other day in which a returned traveller spoke, among other things, of religious conditions in Germany. The churches, he said, were empty. About two weeks ago, a young Englishman, present in this country as a representative of the Youth Movement abroad, came into our study and gave us his impression of the prosperity of American churches. "Prosperity"

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We exclaimed in amazement; "do you call our churches prosperous?" "Yes," he replied; "that is as compared with the English churches. They are all gone; nobody attends them any more." Yesterday a Polish-American visited us, and talked of conditions in Poland to-day. "Most of the Poles," he said, "are losing their religion. Fifty per-cent never enter a church." Here are three entirely independent sidelights on the European situation, and all point to the same fact—that organized Christianity is falling rapidly into the final stages of decay. The retiring moderator of the Presbyterian church in this country, Dr. Calvin C. Hayes, was insistent in his address to the General Assembly on May 17th, that "the church is not dead or dying. She is the livest institution that the world knows anything about." It would be interesting to discover where the good Doctor gets his facts for an assertion of this kind: and just why it is necessary to proclaim that "the church is not dead or dying," if she is actually such a live institution. We recall that Daniel Webster said "I still live" so close to the moment when he died, that these words were the last he ever spoke! Say what we will, boast as we may, the sands of the church's life are running out. Another fifty years, and the story will be "a tale that is told."

THE GURUKULA SAMACHAR

Motto I.—By force of *Brahmacharya* alone have sages conquered death—*The Veda.*

Motto II.—The welfare of society and the justice of the arrangements are, at bottom dependent on the character of its members.....There is no political alchemy by which you can get golden conduct out of leaden instincts—*Herbert Spencer.*

THE WEATHER

The weather is a strange combination of contraries. The sultry heat of the mid-day leaves no doubt that the summer is at its zenith. But the refreshing and pleasant coolness of the night tells a different tale. Isolated patches of clouds, harbingers of the rainy season, are generally seen hovering in the sky tantalising the victims of oppressive heat with a promise of rain which they seldom fulfil. Our stream is daily gaining in volume and force. It is luxury to bathe in its ice-cold waters in this season. The neighbouring hills that looked so dry, bald, and sere till recently are gradually assuming a fresh soft velvety hue.

THE STAFF

Professor Ram Saran Das Saksena M. Sc., professer of Chemistry tendered his resignation which was accepted by the authorities very reluctantly. He had served the Gurukula with great devotion for five years.

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In recognition of his services a dinner was given by the Gurukula authorities to which all the Brahmacharis and members of the staff were invited. On the eve of his departure he was presented with addresses by the Brahmacharies and the members of the staff. He left the Gurukula on the 30th June. Mr. Deva Mitra of the Punjab University has been appointed to teach Chemistry in his stead. Pandit Om Prakash Vidyalankar who has been working as Demonstrator in our medical college is going to Calcutta for further study and has consequently obtained two years' leave. Another appointment is expected shortly to be made to fill the vacancy.

THE SAHITYA PARISHAD

An ordinary meeting of the Sahitya Parishad came off in the first week of June. Principal Rama Deva was in Chair. L. Nand Lal M. A, L. L. B., professor of philosophy read a paper on Soul. The paper was followed by some high discussion. Then the learned president made some highly interesting and instructive remarks on the subject and the meeting came to a close. The anniversary of the Sahitya Parishad was celebrated with becoming zeal on the 17th of June. Papers were read, speeches were made, the work of the Parishad during the past year was reviewed and criticised, and suggestions were made for the improvement of the club. The proceedings were wound up with a Sahbhoj in the evening.

A LECTURE.

Swami Swatantra Nand delivered a lecture to the students and staff of the University assembled in the College on the history of the ten Sikh Gurus. The lecturer narrated the history of the Sikh religion, briefly yet lucidly and accurately, from its origin till the time of the last of the Gurus in the course of an hour. He gave very interesting anecdotes from the lives of the Gurus. The lecture was highly illuminating and every body appreciated it.

THE SHIKSHA PATAL.

A meeting of the Shiksha Patal (the Board of Education appointed by the Antrang Sabha) came off on the second June at Mayapur, and on the third June at the Gurukula. The principal work to be done was the prescription of curriculums for three Colleges and the Adhikari Classes. Principal Rama Deva had prepared a sketch of courses of study for the consideration of the Patal. After two days' discussion and deliberation the final decision was arrived at.

EXERCISE.

Every student in the Gurukula has to take some exercise everyday in the evening. Swimming and wrestling are the favourite forms of exercise in summer. There are two wrestling grounds, one for the School and the other for the College students Several pairs are seen wrestling in each ground everyday. It does one good to see the muscular and strong frames of Brahmacharis exerting themselves and standing severe pressure and strain.

Asanas, (postures favourable to concentration of mind and healthy

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one of various organs and functions of the body) too, have of late become popular once more. Brahmachari Rama Chandra of the fourth year class can perform more than forty Asanas. The other day, he exhibited his performances before the students and the staff. Several other Brahmacharis and members of the staff are engaged in the same pursuit. Professor Rama Murti's exercises also are practised by some of the students.

HOSPITAL.

The record of health is very satisfactory. Very few students fell ill during the last two months. The heights, weights and chests of the students are measured every month. And judged by these criteria the students are gaining regularly and remarkably.

THE PRIMARY CLASSES.

The primary classes were transferred from Gurukula Indraprastha to Gurukula Kangri at the commencement of this session in order to keep the youngest students under the direct supervision of the highest authorities. Each class has been placed under the charge of a Sanataka (graduate of this institution) under whose sympathetic and intelligent handling the students are making a rapid progress.

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THREE GREAT ACHARYAS.

SANKARA, RAMANUJA, MADHWA.

PREFACE:—Sankara, Ramanuja and Madhwa are the three Great Acharyas whose teachings hold sway over the bulk of the Hindus all over India. They are equally appreciated by the best thinkers of the day even among the Oriental Scholars of Europe and America. An attempt is made in the following pages to bring under one cover critical sketches of their life and times together with an exposition of their respective systems of philosophy. It is hoped that this comprehensive edition will be welcomed by the public.

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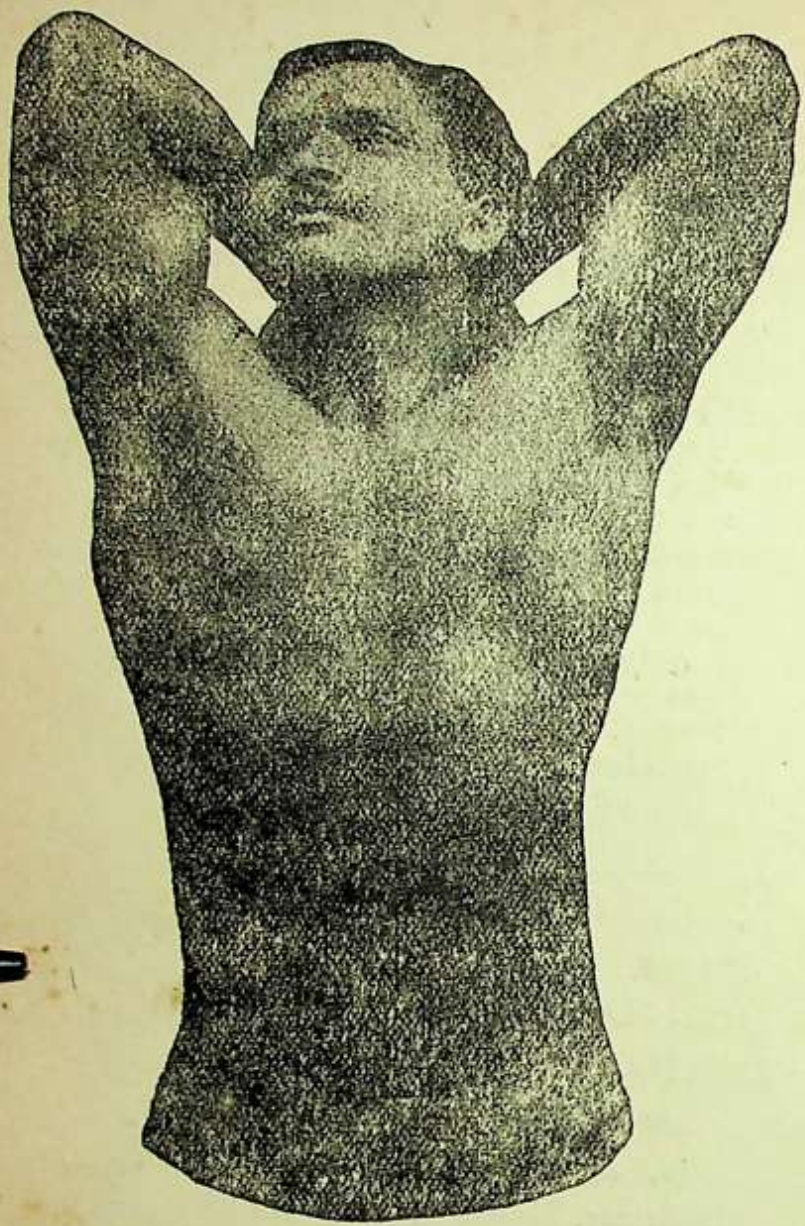

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